

MANUFACTURERS' RECORD

A WEEKLY SOUTHERN INDUSTRIAL, RAILROAD AND FINANCIAL NEWSPAPER

Trade-Name Registered in the U. S. Patent Office.

VOL. LV. No. 17. }
WEEKLY.

BALTIMORE, MAY 6, 1909

{ \$4.00 A YEAR.
SINGLE COPIES, 15 CENTS.

Manufacturers' Record.

PUBLISHED EVERY THURSDAY BY THE
MANUFACTURERS' RECORD PUBLISHING CO.
Baltimore.

RICHARD H. EDMONDS, President.
FRANK GOULD, Vice-President.
VICTOR H. POWER, Treasurer.
I. S. FIELD, Secretary.

RICHARD H. EDMONDS,
Editor and General Manager.

EDWARD INGLE, Managing Editor.

ALBERT PHENIS,
General Staff Correspondent.

Branch Offices:

New Orleans—1012 Maison Blanche.

New York—52 Broadway.

Boston—170 Summer Street.

Chicago—1116 Fisher Building.

St. Louis—543 Century Building.

Subscription, - - - - - \$4 a year
(payable in advance) to United States,
Mexico, Cuba, Porto Rico, Hawaii and the
Philippines.

To Foreign Countries (including Canada) in
the Postal Union, \$6.50 a year.

[Entered at the Baltimore Postoffice as sec-
ond-class matter.]

BALTIMORE, MAY 6, 1909.

Mr. Albert A. Small, 9 East 3d street,
Tulsa, Okla., in writing to the MANU-
FACTURERS' RECORD upon another sub-
ject, says:

I want to thank you for your kind notices
and also compliment you upon the results
that a notice or an announcement in your
magazine brings. We incorporated a factory
or two here and you made a note of it and
the enquiries were many coming from that
notice. And then when we organized the
Oklahoma Union Traction Co. you made a
very nice notice of this, and the number of
enquiries and notices we received shows to
us that your paper is read by many through-
out the country.

Mr. Small's acknowledgment of the
value of the MANUFACTURERS' RECORD
for bringing enterprises to the attention
of the public is only one of many letters
of similar character that have been re-
ceived by us, but it is none the less
gratifying.

FREE COAL.

In a paper prepared for the West
Virginia Mining Association on the tar-
iff on coal Mr. Charles M. Barnett,
president of the Chesapeake & Ohio
Coal & Coke Co., presents facts indi-
cating clearly the danger to many inter-
ests of the country in the proposition of
reciprocity in free coal between the
United States and Canada. He points
out that advocacy of this reciprocity is
practically confined to the coal opera-
tors of Western Pennsylvania and Eastern
Ohio, and that opposed to it are the
following facts:

It will reduce American customs reve-
nue without benefit to American indus-
tries.

It will paralyze the industries of
West Virginia, and will hurt other dis-
tricts.

It will ruin coal operations of Mon-
tana, Washington, Wyoming.

West Virginia coals cannot success-
fully compete in New England against
Nova Scotia and foreign coals coming
in duty free.

The crippling of West Virginia coal
shipments to New England will, in turn,
jeopardize supplies of smokeless coals for
American Navy needs.

Reciprocal free trade with Canada
will seriously handicap American coast-
wise fleets.

It will jeopardize the large invest-
ment made in and on the Virginian
Railway.

It will ruin investments in vessels en-
gaged in coastwise trade and in piers
in New England erected and equipped
to handle West Virginia coals.

Against these facts, upon which he
elaborates very fully, Mr. Bennett cites
the comparative absence of demand on
the part of the people of the country for
free trade in coal, and says that the
demand of a few favored companies
should not weigh against the large inter-
ests whose existence is dependent
upon a reasonable and uniform duty
being maintained on all grades of bitu-
minous coal.

A BUSINESSLIKE PLAN FOR CITY DEVELOPMENT.

Men of affairs of Lynchburg, Va.,
have upon more than one occasion in
recent years shown a vigorous spirit in
the cause of the material development
of their community. Nothing that they
have done has had more practical effect
than that which is promised in the
recent formation of their Chamber of
Commerce. Lynchburg has a Retail
Merchants' Association made up ex-
clusively of men in retail trade. It has
also a Board of Trade, with manufac-
turers and wholesale dealers as its
members. These two organizations
work upon distinct lines, contributing
to the growth of the city, but naturally
not broad enough to enlist the interest
of all progressive citizens. So a Cham-
ber of Commerce has been formed with
the definite purpose of securing manu-
facturing plants for Lynchburg, of as-
sisting and fostering in every legitimate
way manufacturing plants already in
operation there, and of inducing large
manufacturers established in other sec-
tions of the country either to start
branch factories or to open branch dis-
tribution offices at Lynchburg. The
growth of one industry there demon-
strates the advantages of Lynchburg as
a manufacturing point and as a distribu-
ter. Nine years ago the Craddock-
Terry Company began to make a few
women's shoes on a small scale. That
marked the beginning of the shoe indus-
try in Lynchburg, where today there
are five large factories with an annual
output of shoes valued at about \$3,500,-
000. Three of the manufacturing firms
also job some shoes, and, besides, there
are three houses doing a strictly jobbing
business, and, consequently, Lynchburg

distributes through the South annually
more than \$8,000,000 worth of shoes, an
amount greater, it is claimed, than that
represented in the distribution outside
the limits of New York city made by
the manufacturers and jobbers of shoes
in that city. Five wholesale dry goods
and notion houses at Lynchburg do an
aggregate annual business of about
\$6,000,000, and additional evidence of
Lynchburg's excellent position as a dis-
tributing point for any manufacturer
doing a national business is the fact
that Lynchburg ranked fourth last year
among such cities as New York, Chi-
cago, Philadelphia, Boston, St. Louis,
Baltimore, Cleveland, Buffalo, Cincinnati,
Pittsburg, San Francisco and New
Orleans as to the number of machines
distributed by a company which has
offices in 49 of the leading cities.

Recognition of the value of such facts
to manufacturers and the determination
to make them as widely known as pos-
sible, to induce the settlement in Lynch-
burg of as many desirable industries as
possible, and to assure them every pos-
sible opportunity for healthy growth,
led to the organization of the Chamber
of Commerce.

In some respects this body is of novel
character, but with the novelty that
appeals to the business mind. Its mem-
bership includes not only members of
the two bodies already mentioned, but
also bankers, real-estate men, hotel
men, lawyers, doctors, preachers and
men interested in educational affairs,
besides a great many young men, such
as bookkeepers, clerks and factory em-
ployees. It is an incorporated body, and
its members, numbering between 500 and
600, instead of paying membership
fees, bought stock in the corporation,
payable 20 per cent. on demand and 20
per cent. thereafter, until finally paid
up. This plan made possible a mem-
bership permeating a diversity of in-
terests in the city that could not have
been obtained upon a uniform fee plan.
If the fee had been placed, for instance,
at \$200 a year, the Chamber of Com-
merce could not have secured a suffi-
cient number of members to produce an
annual revenue of \$10,000. Even if
that had been possible, the Chamber of
Commerce would have had as members
only 50 individuals or corporations, and,
consequently, interest in its plans could
not have been as widespread as under
the existing arrangement. With a mem-
bership fee or yearly assessment of \$10
a year, it was believed that the Cham-
ber could not have secured any larger
number of subscribers than it now has,
and, while the interest in it would have
been quite general, it would have had
comparatively little means for the vent-
ing of that interest upon productive
lines. As it is, stock amounting to be-
tween \$65,000 and \$70,000 has been
taken, and that is expected to yield an
annual income of between \$13,000 and
\$14,000, which, with a thorough under-
standing on the part of the stockholders
that their stock has no intrinsic

value and will pay them dividends only
in their share of increased prosperity
for the whole community, will be spent
in furthering the business purposes of
the Chamber of Commerce for the busi-
ness advancement of Lynchburg. With
an income of from \$13,000 to \$14,000 a
year for five years the Chamber of
Commerce should accomplish so much
in that time that at the end of it there
should be no trouble in selling even
more of such stock for the following
five years. Such an income judiciously
spent should add several hundred men
to the number of stockholders in Lynch-
burg's prosperity. The MANUFACTUR-
ERS' RECORD believes that the business-
like thought embodied in the financial
plan of the Chamber of Commerce and
the notable manifestation of a broad
and liberal public spirit in the prelimi-
naries to the organization are a fore-
cast of its eminent success that will in-
spire other cities to do likewise.

BALTIMORE AND FREE IRON ORE.

If it were demonstrable that the
maintenance of the duty on iron ore or
an increase in that duty would check
the importation of ore from Cuba to
Baltimore, and that such checking
would diminish the volume of Balti-
more's outward-bound commerce, the
argument advanced in favor of no duty
on iron ore turning upon that conten-
tion might have a standing in court.
Aside from questions of advantages
given to importers of iron ore from
Cuba under the provisions of the treaty
between the United States and that
island, and aside from the advantage
given to such importers under the draw-
back provision of the tariff act, if the
maintenance of the duty on iron ore or
an increase in that duty should tend to
reduce the commerce at the port of Balti-
more, it would be natural for men in-
terested in the welfare of Baltimore,
including men personally interested in
the importation of iron ore, to regret
the reduction on that line, but if they
had the right spirit they would bestir
themselves to increase the commerce of
the port and enhance the welfare of
Baltimore in other directions.

But if plain English words mean any-
thing, those bearing upon the exploita-
tion of Cuban ores for shipment to this
country printed a while ago can only
mean that shipments of ore from Cuba
to Baltimore will be uninfluenced by
tariff legislation. That point out of the
way, another and a far greater point,
as affecting the welfare of Baltimore,
should be considered when there is a
demand that iron ore shall be admitted
to Baltimore free of duty. Baltimore
is, of all cities of the country, interested
in the healthy development of the
South. Most of the South's material
interests are directly or indirectly Balti-
more's material interests. Anything
damaging the South materially must
react upon Baltimore. It is to the in-
terest of the South that its material re-
sources shall be fully developed. Among
these resources is iron ore. Baltimore

has only a slight immediate interest in the development of Southern iron-ore fields, but it is vitally concerned in the prosperity that will come to the South with the full exploitation of such fields, and it will be damaged in proportion to the damage wrought upon the South by an inauguration of free trade, for the benefit of a handful of interests dominated by an influence that has hardly regarded Baltimore's welfare as of any moment, in the materials which the South will produce abundantly if protected from foreign materials. The theoretical advantage that would come to Baltimore through the duty-free admission of iron ore would be infinitesimal in comparison with the injury that would come to it through the crippling of the South by the free trade policy.

RAILROADS AND COAL.

The decision of the United States Supreme Court on the commodity clause of the Hepburn act, which has just been announced, is a subject of such general interest that some comment upon it is demanded in advance of publication of the full text of the court's opinion. Summed up, the decision is that the railroad companies may transport coal or any other commodity which they have manufactured, mined or produced, providing that their interest in it has been disposed of in good faith before the time of transportation; furthermore, that the railroad companies may own stock in coal-mining or other companies, and the fact that they do own such stock will not render them liable to be regarded as the owners of such coal presented for transportation, and this irrespective of the amount of stock owned by a railroad company in a coal company, provided that the latter corporation was organized in good faith.

The practical effect of this decision, according to the summary which has been given to the press, and which may be somewhat modified by the full text of the opinion, is to place the railroads in the position of being able to continue to own stock in and control coal-mining companies and to transport their product as before the passage of the Hepburn law. Justice Harlan dissented from the opinion on the stock-ownership question, but, with that exception, the opinion of the court, handed down by Justice White, is unanimous. Briefly stated, the decision sustains the constitutionality of the act, but defines its scope, this definition being opposed to the contention of the Government counsel in the case, which was appealed from the United States Circuit Court for the Eastern District of Pennsylvania. The decision of the latter court was favorable to the railroads, and when the Supreme Court decision was announced upholding the constitutionality of the law it appeared at first as if the contentions of the railroad companies had been rejected, but the text of the opinion showed that it was really favorable to the common carriers. The summary of the opinion is as follows:

(1) The claim of the Government that the provision contained in the Hepburn act, approved June 29, 1906, commonly called the Commodities Clause, prohibits a railway company from moving commodities in interstate commerce because the company has manufactured, mined or produced them, or owned them in whole or in part, or has had an interest direct or indirect in them, wholly irrespective of the relation or connection of the carrier with the commodities at the time of transportation, is decided to be untenable. It is also decided that the provision of the commodities clause relating to interest, direct or indirect, does not embrace an interest which a carrier may have in a producing corporation as the result of the ownership by the carrier of stock in such corporation irre-

spective of the amount of stock which the carrier may own in such corporation, provided the corporation has been organized in good faith.

(2) Rejecting the construction placed by the Government upon the Commodities Clause, it is decided that that clause, when all its provisions are harmoniously construed, has solely for its object to prevent carriers engaged in interstate commerce from being associated in interest at the time of transportation with the commodities transported, and, therefore, the Commodities Clause only prohibits railroad companies engaged in interstate commerce from transporting in such commerce commodities under the following circumstances and conditions:

(a) When the commodity has been manufactured, mined or produced by a railway company, or under its authority, and at the time of transportation the railway company has not in good faith before the act of transportation parted with its interest in such commodity.

(b) When the railway company owns the commodity to be transported in whole or in part.

(c) When the railway company at the time of transportation has an interest direct or indirect in a legal sense in the commodity, which last prohibition does not apply to commodities manufactured, mined, produced, owned, etc., by a corporation because a railway company is a stockholder in such corporation.

Such ownership of stock in a producing company by a railway company does not cause it as the owner of the stock to have a legal interest in the commodity manufactured, etc., by the producing corporation.

(3) As thus construed the Commodities Clause is a regulation of commerce within the power of Congress to enact. The contentions elaborately argued for the railroad companies that the clause, if applied to pre-existing rights, will operate to take property of railroad companies and therefore violate the due process clause of the Fifth Amendment, were all based upon the assumption that the clause prohibited and restricted in accordance with the construction which the Government gave that clause and for the purpose of enforcing which prohibitions these suits were brought.

As the construction which the Government placed upon the act and seeks to enforce is now held to be unsound, and as none of the contentions relied upon are applicable to the act as now construed, because under such construction the act by which carriers are compelled to disassociate themselves from the products which they carry and does not prohibit where the carrier is not associated with the commodity carried, it follows that the contentions on the subject of the Fifth Amendment are without merit.

(4) The exemption as to timber, etc., contained in the clause is not repugnant to the Constitution.

(5) The provision as to penalties is separable from the other provisions of the act. As no recovery of penalties was prayed, no issue concerning them is here presented. It will be time enough to consider whether the right to recover penalties exists when an attempt to collect penalties is made.

(6) As the construction now given the act differs so widely from the construction which the Government gave to the act and which it was the purpose of these suits to enforce, it is held that it is not necessary, in reversing and remanding, to direct the character of decree which shall be entered, but simply to reverse and remand the case, with instructions to enforce and apply the statute as it is now construed.

(7) As the Delaware & Hudson Company is engaged as a common carrier by rail in the transportation of coal in the channels of interstate commerce, it is a railroad company within the purview of the Commodities Clause and is subject to the provisions of that clause as they are now construed.

This carefully digested opinion of the United States Supreme Court, which is now made public after long consideration, is a mark of return to a healthy and wise public mind with respect to our transportation lines that should be reflected in legislative action.

DISTRIBUTING IMMIGRANTS.

Retirement of Robert Watchorn from the commissionership of immigration at New York is a case of martyrdom in a good cause, if one of the explanations is correct. It is reported that one of the reasons why he leaves the Government service was his unwillingness to aid the attempt of the Government to assist

in the distribution of foreign immigrants to the South and other parts of the country, under the act of 1907, giving dangerous power to the Government in this particular. It is reported that the attempt has not been successful, and if Mr. Watchorn's resignation emphasizes the failure, he ought to be thanked by the country, and the country should at once urge State authorities to have nothing to do with the efforts to push the scheme through. Not entirely unrelated to this plan is a letter from Prof. Robert DeC. Ward of Harvard University to the MANUFACTURERS' RECORD, in which he says:

Some few years ago I was asked by one of our monthly magazines to write an article on "Immigration and the South," and at that time I took occasion to look into all these matters as closely as I could. One of the sources of my information as to general business conditions in the South was, of course, your excellent paper. It was my conclusion that these movements are fundamentally selfish on the part of their original promoters, and that others are drawn into the congresses and organizations who really are not aware of the real object in view. I am, therefore, particularly glad to see that so influential a paper as the MANUFACTURERS' RECORD has so clearly and so emphatically stated the case, so that "he who runs may read." The South has need to be extremely cautious in this whole matter of alien immigration. I live here in the North, and I know how anxious many persons are to unload our city slums onto the unsuspecting South. The South can see the effects of our recent immigration plainly enough by studying the slums of our great Northern cities. Unless care is taken, similar conditions will develop in the South. I trust that, for the good of the South, and for the information of the North, you will continue at frequent intervals your excellent editorials.

Professor Ward's reference to immigration enterprises recalls the words of Prescott F. Hall in his work, "Immigration," written about the time when one of the foreign-devised immigration schemes to the South came to the surface in the "Southern Industrial Parliament" at Washington. He said:

We read that the Italian ambassador has recently been attempting to establish Italian immigration centers in Texas, Louisiana and Georgia with a view to inducing the agricultural element of Italy to settle the vexing problem of working Southern fields. It is significantly stated in the same dispatch that "the movement will be financed entirely by New York capital." From this it appears that the plan is not one of pure philanthropy, and, indeed, there is good reason to suppose that it is chiefly the railroad and steamship interests who are behind the distribution scheme, and have been booming it as the only hopeful solution of the immigration question.

The reasons for this are not far to seek. On the one hand, these interests realize that their doings in the past have resulted in real and serious evil, and that the public is not going to stand indefinitely a continuance of the same dumping process. It therefore behoves them to create a diversion of immigrants from the seaboard, and more especially a diversion of the public mind from effectual methods of restricting immigration. On the other hand, any distribution scheme tends to increase their own profits—directly, through the transportation of those distributed, and indirectly, by the additional transportation of friends and relatives of those so distributed when they in their turn shall come over.

One of the most hopeful schemes for diverting steamer traffic from Boston, New York, Philadelphia and Baltimore is to induce the steamship companies to make sailings directly from the Mediterranean to Mobile, New Orleans or Galveston, and this has, in part, taken place recently. It must be remembered, however, that this merely removes the evil to another part of the country and scatters it.

What more natural, therefore, than the arrangement for distribution of immigrants made in the law of 1907 under the pressure of the aggregation of representatives of foreign governments wrestling with their problem of undesirable citizens, of alien racial bodies whose members massing in Eastern

cities have opened the eyes of the country to their inherent evils, of transatlantic steamship companies and of financial or party politicians prominent in their pandering to alien elements in the electorate? What easier than to attempt to play, under cover of alleged "Southern" conventions, the South as a sucker, for the purpose of diverting the public nostrils from the stench arising from the refuse of populations massed in New York? Why not finance by capital of that city, the diversion to the South of the steamship companies' dumper?

The MANUFACTURERS' RECORD has again and again emphasized the fact that the Southern men who are led to give a Southern aspect to many of the conferences, conventions, congresses and parliaments are thoroughly sincere in their belief that such movements will benefit their section, and are not aware of the possibility that behind the ostensible purpose of such enterprises, the benefit of the South, lurks an intention not deliberately hostile to the South, but at the same time not interested in the welfare of the South.

There can be not the slightest objection to immigration to the South, provided it is immigration of the right sort, the sort that is productive instead of parasitic, and of the stocks allied to those that have built up the United States.

There can be no objection to transportation companies sharing in the benefits that come from the movement of immigration to this country, provided that movement does not increase the menace already rampant in congested centers of the East, to which Professor Ward refers.

Unfortunately, however, the great bulk of immigration to this country in recent years, swollen through the co-operation of transatlantic steamship companies and foreign governments anxious to relieve their own congestion, has consisted of the parasitic, non-productive elements, or of stocks alien in every particular to the dominant bloods of the United States and coming to this country either for the benefit of their native lands or with a purpose to get what they can out of the country rather than to contribute what they can to its upbuilding.

The provision in the national immigration law for participation by the Federal Government in the distribution of immigrants is, we believe, unconstitutional. Certainly, if used to facilitate schemes for scattering throughout the country the elements in immigration which are already a curse upon the East, it is a menace to the welfare of the United States. The MANUFACTURERS' RECORD again urges Congress to repeal the law under which the division of information in the bureau of immigration of the Department of Commerce and Labor has attempted to operate during the past 18 months or more. We urge our Southern friends not to countenance enterprises of more or less obscure origin in which the best intents and the best wishes for the South run the risk of being misused to the disadvantage of the South.

SOUTHERN SENATORS AND TARIFF.

The vice-president of a lumber company in Georgia who writes to the MANUFACTURERS' RECORD that "Your Daily Bulletin and your MANUFACTURERS' RECORD are as necessary to our requirements as our three meals a day," commending our recent editorial on the

duty of Southern Senators in the pending tariff legislation, says:

It does appear to us that Senators who represent the South would treat the tariff proposition as if they owned stock in every industrial plant in the South; for, there is no question about having a tariff. Why do they not act with the same eye to business as if they were conducting an individual industry that needed protection for its industrial life and stop whimpering over the other fellow taking care of himself. It is not a question whether we are or whether we are not going to have a tariff; therefore, it is only fair to the South that its Senators give it as much protection as possible.

A vital point is made here by a Southern business man worthy of consideration by all Southern Senators. They have before them daily the sight of other Senators striving to turn tariff legislation to the special advantage of their own sections, treating the matter as a business proposition to be settled upon a business basis and disregarding academic theories which lose sight entirely of the big, rough edges of practical, everyday affairs. New England Senators and those from other parts of the country which have waxed prosperous under a protective tariff are not holding the protective policy as something sacred, but, on the contrary, are not hesitating to breach it for the benefit of a few interests in a demand for free trade in such "raw materials" as iron ore, lumber, coal, hides, etc. Such Senators act upon the principle that they are not to blame if Senators from sections producing such "raw materials" may be so attached to the free-trade theory that they are willing in worship of it to sacrifice the material interests of their constituencies.

The MANUFACTURERS' RECORD sees evidence that such short-sightedness is a steadily diminishing influence, not only among Southern Senators, but also among members of the House of Representatives from the South. It has not, however, waned sufficiently. Representatives of the South in Washington have evidently not reached the position which they should occupy, where they shall make a determined stand along with other advocates of equity in the contention that removal of duty or reduction of duty upon any "raw material" produced in this country with which like "raw material" from any other country may compete shall be accompanied by removal of the duty or corresponding reduction of duty upon every article into the manufacture of which such raw material enters.

Maintaining that position, advocates of equity in legislation, of plain American fair-play, should make impossible the reintroduction into the tariff bill, either through Senate amendment or in Committee of Conference, of the flagrant evils introduced or aggravated in the Payne bill of the House of Representatives. The proposed maximum-minimum amendment in the Senate is even worse than the feature of the Payne bill that it would replace. It is enough to put every Senator upon his guard as to every other amendment that may be offered. It suggests that every line of every proposed amendment must be carefully scanned, even though it takes all summer, to the end that as few opportunities as possible be created for deals in conference committee, the significance of which is not likely to dawn even upon the majority of the members of either house of Congress, if the ramming-through process of tariff legislation which has prevailed to this time is to be maintained.

The Congress of the United States should permit the framing neither of tariff revision to the benefit of a few

interests or a small section of the country, nor of a character that would permit Congress to evade its fundamental duty to make fiscal laws, whether the evasion be by way of a tariff commission or through enlargement of executive discretion in the matter.

Because the welfare of the whole country is dependent upon the welfare of the South, it is peculiarly incumbent upon the representatives of the South in Congress to turn tariff revision to the material advantage of the South.

Mr. Frank Follansbee of East Falls Church, Va., writing of his use of the MANUFACTURERS' RECORD to keep informed of Southern development, says:

I would have the State appropriate money, if possible, to judiciously place it in chief families in every neighborhood in the Commonwealth. It would stir and enthuse and help bring things to pass as no other class of public instruction that could be given. If the young men of our State could read the MANUFACTURERS' RECORD it would produce a new kind of genus homo in the next generation. Every old idea would soon go, and the new thought and life would make us a new people. With the MANUFACTURERS' RECORD cut off from our exchange list I should feel that the day had shaded off into a twilight that would shut out the good cheer of the new day that has come to us of the South through its shining and life-giving power.

HOLLANDERS FOR NORTH CAROLINA.

Mr. Hugh MacRae of Hugh MacRae & Co., Wilmington, N. C., who has been active for some years in inducing healthy immigration to North Carolina, telegraphs the MANUFACTURERS' RECORD from New York:

"Dr. Frederick Van Eeden, a Dutch sociologist, with New York associates, has selected 11,000 acres of land near Wilmington, N. C., with a view to establishing there a co-operative colony. Dr. Van Eeden sails today for Holland, where he expects to secure colonists from among the skilled agriculturists of that country."

Another dispatch from New York intimates that ultimately 11,000 more acres may be included in his colony tract, giving it 35 square miles of territory; that \$500,000 has actually been subscribed for the undertaking, in which every person employed will have a financial interest. If this tract is to be cultivated as men cultivate land in Holland, the success of the colony will mean an important addition to the productive energies of North Carolina. Probably no other place in the world has developed agriculture as thoroughly as Holland, and in that development during the centuries has grown up a population whose members should be welcome additions to the population of any State. Mr. MacRae is to be congratulated upon the inception of this colony plan, and it is hoped that it may so work out that thousands of sturdy Hollander may be induced to make their homes in North Carolina.

THE COTTON MOVEMENT.

According to the report of Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, the amount of cotton brought into sight during the first eight months of the present season was 12,505,047 bales, an increase of 2,107,578 over the same period last year. The exports were 7,432,681 bales, an increase of 790,668 bales. The takings were, by Northern spinners, 2,347,192 bales, an increase of 877,808 bales; by Southern spinners, 1,926,171 bales, an increase of 140,878 bales.

Mr. August F. Trappe, secretary of the State Bureau of Immigration, estimates that \$1,000,000 represent the results of immigration to Maryland during the past year.

South's Prosperity from Implement Dealers' Viewpoint.

[Written for the Manufacturers' Record.]

Reflection of gratifying prosperity and progress in Southern agriculture is had in letters published in the following pages from representative manufacturers or sellers in the South of farm implements and machinery. The letters cover the territory extending from the Pennsylvania line to the Rion Grande and, written by men in close touch with farmers of many kinds, they constitute an excellent index to conditions. With few exceptions, and they largely consequent upon local influences, the conditions as thus pictured are conditions of prosperity hardly possible a few years ago and steadily tending to become even greater.

With increasing freedom from mortgages and other debts following good prices for cotton, tobacco, fruit and other farm products, farming methods have been improving for several years, with a freer buying of tools and machinery and a better treatment of the land. One individual with an experience of 2 years in the trade recalls the time when not more than 25 per cent. cash was paid in purchases of farm machinery, but he notes that in the past season such payments have averaged 86 per cent. cash, and he looks for continued improvement, as farmers have come to realize the importance of rotation of crops and of the use of barnyard fertilizers. Another finds that the only complaint from farmers is that the movement of goods is too slow.

From one of the greatest textile manufacturing centers comes the record of better prices for farm lands and better markets for products, due partly to the increase of consuming populations at industrial centers, but at other points there have been evidences of an inclination to return to the farm from towns and cities because of the temporary diminution of opportunities for work in mines and factories. Lands are demanding better prices because the stronger financial ability of farmers has permitted them to make long-needed improvements and to enhance the fertility of the soil. In Missouri, for instance, land values have increased 40 or 50 per cent. in the past five years. In Texas land can be purchased in some localities for from \$5 to \$15 an acre, but in other parts \$100 an acre are gladly paid, especially in the Brownsville region, where irrigation has advanced the price in three years from \$1 to \$100 and more an acre. In 10 years some land in Georgia has advanced from \$10 to \$50 an acre, and other lands from \$3 and \$4 an acre to \$15 and \$20 an acre, with the prospect of at least a doubling within the next few years. Improved conditions in Georgia are traceable, not so much to the influx of newcomers as to more businesslike methods in the conduct of farm operations, including a more general use of improved machinery and a stronger determination on the part of farmers to "live at home."

There is more diversification in crops than heretofore. Comparative inactivity recently of some manufactures in West Virginia has not impaired the prosperity of the farmers there, and in some localities they are planting a large amount of tobacco. Increased prices for corn are checking in Tennessee an expansion of cotton acreage, as the farmers are making strenuous efforts to plant more corn. Dating from the disastrous freeze of 14 years ago, which gave a temporary setback, but only a temporary one, to the cultivation of citrus fruits, the growing of vegetables and small fruits for the early markets in the North has now placed Florida truckers in fine shape. In Mississippi, which has been a heavy buyer of feed from the

West, more attention is now being given to the raising of home supplies. This diversification has extended into Arkansas, where the river bottom lands produce corn and cotton, the mountains and valleys grow fruits and cereals and the prairie, hay and rice. In several counties the acreage in rice has been very largely increased this season. There has been in the past 10 years a great change in Texas from raising almost exclusively corn, cotton and wheat to raising in addition hogs, poultry, peaches, peanuts, rice, onions, small fruits and semi-tropical products, and two week's drouth in parts of the State finds the farmers in most cases financially able to stand a poor crop, either of cotton or of corn.

Immigration has had quite a good deal to do with enhancing the values of lands. The holding of lands in large bodies in Mississippi has been a drawback in the past upon immigration on the part of the comparatively small farmer. But that situation is changing and new people are coming from other quarters of the country, especially Illinois and Iowa. This movement is likely to be hastened with the progress of reclamation of rich alluvial lands in some of the Delta counties and the bringing under the plow of cut-over timber lands in the southern parts of the State. Maryland has recently received quite a number of substantial settlers from the West, and a steady flow of like character has gone toward Virginia. New people from the North and East are going into Arkansas, where a large per cent. of the farmers have a surplus of money sufficient to carry them until harvest. Probably the greater number of immigrants from other parts of the country and from abroad have found homes in Texas.

The letters elaborating upon these facts follow.

ARKANSAS.

F. B. Dunlop, Speer Hardware Co., Fort Smith, Ark.:

We do not handle implements, having discontinued this line some five or six years ago. In our opinion, the financial condition of the farmers in the Southwest is better than we have ever known it. The agricultural interests are greatly improved and getting in a better shape. New people are coming in and taking up farm lands. They are largely from the North and East. Altogether we are in an optimistic frame of mind at the present time, and feel that after the tariff legislation has been decided upon the markets will settle down, and after the middle of the year we should have a good business.

E. E. Moseley, secretary Cleveland-Matthews Hardware Co., Pine Bluff, Ark.:

Business generally has been rather inactive this spring in this section, with the exception of farming implements. We increased our stock of improved implements 50 per cent. over that of last season, and while we are not in a position to state definitely what the results of this preparation will be, the outlook seems favorable for the largest implement business we have ever done. There is rather a tendency to diversified agriculture. The matter of rice-growing has been under experiment for the past few years, with splendid results. However, in view of the large per cent. of colored population, the increase in the use of improved implements and the tendency toward diversified agriculture are not as evident as in other localities. Without doubt farmers are in better condition here than ever before, and passed through the recent panic without much worry or loss, whereas merchants and manufacturing interests suffered serious damage. We find

that perhaps 60 per cent. of the farmers have a little surplus money, sufficient, at least, to carry them through until harvest. This refers to white farmers. The negro is furnished and crops mortgaged by supply houses. On account of excessive freight rates business has been demoralized for the past 90 days. A recent decision of the Supreme Court instructing a general reduction of 66% per cent. should enable our wholesalers to compete with out-of-State concerns. Aside from some foreign immigrants, Italians largely, we see very little change in population. Real-estate values are firm.

Edmond Craig & Co., Little Rock, Ark.:

The sales on improved farm implements certainly indicate an improvement along the lines of diversified agriculture, and consequently a decrease in acreage in cotton. Rice culture in several counties has proven a great success and acreage has very largely increased this season. Farmers, as a rule, are not asking the long-time credit of former years. Our immigration is not nearly so large as the opportunities offer. Price of land is very low compared with lands of both the Northwestern and Southwestern States, and therefore the lands are, we think, likely to advance in price in the near future. There is great variety of climate and soils, river bottom lands for cotton and corn, mountains and valleys for the cereals and fruits, prairie for rice, hay and pasture. A little money, contented mind, willing hand and proper economy will bring more returns in Arkansas than in any section we know of.

FLORIDA.

Knight & Wall Company, Tampa, Fla.:

From an agricultural standpoint this section, like all others, has been largely benefited by diversified farming. Prior to the freeze of 1895 citrus fruits were the main dependence of the farmers, but while being forced to wait the bearing time of citrus fruits, the farmers then turned their attention to the yearly crops of vegetables and berries, which have paid handsomely, and today the truck farmers are in fine shape financially.

GEORGIA.

The Williams Buggy Co., Macon, Ga.:

Our business up to the first of the year was not satisfactory. Since the first of 1909, however, orders have been coming in right along, and we are running considerably behind, with additional business piling up every day. Our business would indicate that the hay and grain business for this State is more than 10 per cent. in advance of what it has been in previous years. We feel that farmers in this territory are in a more prosperous condition now, and have more money than they did in 1907. We find it much easier to sell buggies and wagons for cash than ever before. There are very few new people coming into our immediate territory here, and while farming lands have advanced materially in the last few years, we think this is caused by our farmers buying improved machinery and working their farms on a more businesslike basis than in past years.

John T. Davis, Jr., president Davis Warehouse Co., Columbus, Ga.:

It is our opinion that the financial condition of the farmer is better than it has ever been. However, we do not think the demand for agricultural implements since January 1 goes to show that there will be any increased acreage in cotton, nor do we think there will be. The agricultural interests of our vicinity are improving each year. The farmers are gradually beginning to realize that it is best to live at home and offer their cotton crops for cash money. Aside from the fact that they are using better farm tools and implements, they are being educated to make more on

the ground. There is not a great many new people coming in taking up farm lands, from other sections of the country. Our farm lands are increasing in value each year. We know of lands around here only a few years ago that could have been bought from \$3 to \$4 per acre that are now worth from \$15 to \$20 per acre. Now, this is not brought about by the increase of settlers from elsewhere, but it is wholly on account of the better financial conditions of not only our farmers, but our whole Southland. While we, like the balance of the country, are just closing up a year of financial depression, we believe there is one of the brightest futures ahead for our country that has yet come, and we do not think the day is far distant when lands selling at \$15 to \$20 an acre will bring two to three times that much.

E. F. Lummus, president F. H. Lummus Sons Company, Columbus, Ga.:

Up to date our business is very little behind that of last year, which was next to the best that we ever had. We regret to state that we are not in position to advise you fully as to the financial condition of farmers in this vicinity, but do not think, from our experience, that they are in as good condition as they were one year ago. We are not in position to advise you as to new people coming in and locating, as we do not get out and mingle among our customers, leaving this to our salesmen. Land values in this section, however, are increasing very rapidly. We find that the class of people with whom we deal are more conservative than they have been in the past, and, owing to present conditions, we are scrutinizing credits very carefully.

Clyde L. King, president Atlanta Agricultural Works, Atlanta, Ga.:

Our experience indicates that there is too much scarcity of money among planters in our section of the South to permit them to buy anything above the bare necessities in the way of implements, etc. We believe there is an earnest desire on the part of a great many farmers over the South to use better agricultural tools and to diversify their crops. The conditions which have prevailed for the past two seasons in money matters, however, have prevented their doing otherwise than continuing to make almost altogether cotton, and that with crudest implements. The farmers' financial condition is not so good this year as it was last year, and was not as good last year as it was the year before. This is caused, in our judgment, by the price of cotton ruling low as compared with two years ago, and from the fact that they could not secure money enough from the smaller country banks to enable them to do anything but barely feed and clothe their people. The great mistake in the South seems to be that the farmers are generally a year behind, and start out at the beginning of planting time by mortgaging their crops and promising so many hundred pounds of cotton to the money loaner before he has any assurance of a living for the year ahead. In our opinion, if the bankers generally would take more interest in the farmers by encouraging them to diversify their crops more, securing themselves for money loaned them in other ways except by demanding so many bales of cotton, it would not take many years for the intelligent Southern farmer to be ahead of the game good and proper. For the reasons above stated, there is no marked disposition shown for better farming tools; however, we believe that the people are gradually coming to it, and that if the farmers continue to use their brains, as it would seem they have been doing a little more of for the past two or three years, that the day is not far distant when many improvements will be made in the farming methods over the Southern States. We are getting no immigrants to speak of.

Some farmers come South from time to time from the North and West, but the number is small. There is a decided interest in the value of farm land, generally speaking, and a great many farms in Georgia are bringing or can't be bought for less than \$50 per acre, which could not have been sold 10 years ago for \$10. Of course, this does not apply to all farms, but as a general proposition the tendency toward an increase in the farm value is very marked.

KENTUCKY.

W. P. Greusling, treasurer Kentucky Wagon Manufacturing Co., Inc., Louisville, Ky.:

Without going into details of the whys and wherefores, the business outlook with us is on the upgrade. Improvement has not been as rapid as we expected some time ago, and while this has been disappointing, the ultimate result will doubtless be more satisfactory, as slow and conservative progress mean permanency and stability. There has been as yet no strong revival in the demand for farm, log and lumber wagons, but our business since the first of the year has been considerably in excess of that for the same period last year, and the prospects for summer and fall business look encouraging to us.

Wm. B. Hardy, treasurer and general manager Brinly-Hardy Company, Inc., Louisville, Ky.:

Business conditions in our line of plows and agricultural implements have shown a decided improvement over the past three years, the volume of sales being handsomely increased this present season. We believe that we can safely state that there is an increasing interest in diversified agriculture all over the cotton-growing States, where our largest business is secured. In the local territory, consisting of Kentucky, Tennessee and Southern Indiana, we are quite sure the financial condition of farmers is improved over former years. Things are gradually getting into better shape by the use of improved farming tools and implements of all kinds, and this naturally tends toward increase in value of farm land. Some days ago we had the pleasure of an interview with one of our most prominent young farmers in Kentucky, who also owns and operates a large plantation in Louisiana. This gentleman has lately returned from that section, where he had planted 60 acres of Irish or white potatoes, something unheard of in that immediate vicinity. He states that a great many of the planters in that section were apparently amused at this undertaking, for the reason that it has always been the opinion of the Southern planter that the cotton-planting negroes knew nothing about raising anything except cotton, and while he entered upon this undertaking with fear and trembling, he found these same negroes very intelligent, and he was able to show them how to do the work in a highly satisfactory manner. After accomplishing good results, as far as the planting of these seed potatoes was concerned, he mentioned the fact to these negroes that he understood that they would never be able to do any work of this nature, and the answer to his remarks was to the effect: "Nobody never showed us how to do nothing." This, we think, is a fair example of what can be done if the white people of the South would only take enough interest in these negroes to teach them improved farming methods.

The South is rapidly becoming the most resourceful part of these United States, and farmers from the North settling in this territory are using improved methods with most excellent results. The Northern manufacturers of plows and agricultural implements and machinery are also making strenuous efforts to establish them-

selves in the Southern territory, and naturally the representation of so many different houses has stimulated a demand for improved and better farming tools of all kinds, which, as a rule, are introduced by giving field exhibitions. We feel that the time is not far distant when all of this Southern territory will be more or less equipped with labor-saving machinery of all kinds, which will tend toward rapid development of the entire Southland. We desire to express our appreciation for the interest you have shown in this matter, and shall be very glad indeed to bend our feeble efforts toward lending such help from time to time as is within our power.

C. F. Huhlein, vice-president and general manager B. F. Avery & Sons, Inc., Louisville, Ky.:

Our spring business is an improvement over the same season of last year, though not up to the high-water mark of seasons preceding last year. The financial condition of farmers in this vicinity is generally favorable, and agricultural interests and farming methods seem to be making gradual progress.

Belknap Hardware & Manufacturing Co., Inc., Louisville, Ky.:

Business conditions are reasonably active; that is, there are a great many orders, but the quantities ordered are rather small, inasmuch as there is no immediate prospect of increasing prices, and the market is never especially active unless there is such promise, real or imaginary. Sales in agricultural implements and tools have been unusually large, and they do indicate an increased interest in diversified agriculture. Owing to the high price of cotton and tobacco and all fruit and farm products, there has been more free buying of agricultural tools and implements than ever before. We think there is an increased acreage in cotton. The financial condition of the farmers compared with previous years is most flattering. They all seem to have money to provide for their wants. We have less complaint of debts, mortgages, etc., to be satisfied. We think the agricultural interests of our vicinity are improving. At any rate, they are in excellent shape at present. Farming methods undoubtedly are improved, especially the farmers who are close to railroads. The increase in their products can be readily discerned. As to taking up farming lands, there is comparatively little increase in rural population. What there is from neighboring States, especially those which are north and east of us. There is a marked increase in the value of farm and pasture lands, based on the better financial condition of the farmers and the temptation to make the land productive, as the returns are so eminently satisfactory.

LOUISIANA.

A. Baldwin & Co., Ltd., New Orleans: Business at this time may be classed as inactive. There is a strong tendency toward diversified agriculture. Farming methods are certainly improving. Farm lands are increasing in value proportionately to the immigration, which up to very lately was good.

MARYLAND.

J. S. Rawlings, Jr., Rawlings Implement Co., Baltimore:

Owing to the fact that the farmers are in the field with their machinery now, our trade is at its most active period of the year. We would state that the dealers in general, all through last winter, exhibited a hesitancy in placing advance orders for our lines of goods, and when we could succeed in having them buy, their specifications were not up to last year. That their trade is close to ordinary is evident by the numerous telegraphic orders that we are receiving for our goods. We be-

lieve the financial condition of the farmer, and differentiating the general farmer from the trucker, is better than we have ever known it, while it is also our belief that he has not participated as fully as might be supposed in the high prices of food products, many prices rising after his stock had left his hands. We consider that the agricultural interests of our trade are getting in better shape; farming methods are undoubtedly improving. The Westerner is coming, especially into the State of Maryland, in large numbers. The value of farm lands, we believe, is increasing, based, we think, most largely upon the better financial condition of the farmer.

MISSISSIPPI.

Louis Hoffman Hardware Co., Inc., Vicksburg, Miss.:

We think that the conditions in Mississippi are very good, although there is a great deal of land unsettled. We have immigration from the Western States, which is in the habit of using more improved machinery than was formerly used in this section of the country. There have been a number of failures of small merchants, but they were caused by credit being too easy and parties overstocking themselves with goods when unable to pay. At the present time the crops seem to be in a better condition than they have been for several years; the weather having been good, renders the prospects for a good crop almost certain. A good many planters are raising rice in place of cotton this season.

The Goyer Company, Greenville, Miss.:

We have discontinued the sale of hardware and agricultural implements, but as our business operations afford us opportunities for procuring the information you desire, we nevertheless undertake to answer your inquiries. In reference to business conditions, we beg to state that they have been unsatisfactory so far this season, and we are reliably informed that this, Washington county, has bought fewer agricultural implements than usual, but that the adjoining counties in the Delta have shown an advance in this respect. This, to a certain extent, is due to the fact that other counties are giving active attention to the matter of drainage, which is the all-important condition in working this Delta land successfully, while Washington county as yet has been unable to make any progress in the matter. Some interest in our section has been manifested toward the diversification of crops, but it has expressed itself mainly in quite a large increase of corn acreage. As you are perhaps aware, this entire section has been in the habit of buying its feed in the West, and it is now beginning to realize the importance of producing this item at home. The State has located an agricultural experimental station in the bounds of this county, which is beginning to attract notice, and will undoubtedly have a wide and beneficial effect in inducing our farmers to resort to diversification of crops and improvement of method. New people are coming in to purchase our lands—mainly those from Iowa and Illinois, who reside along the Illinois Central Railway. European immigration has expressed itself only in the importation of Italian labor, which is not yet very general. Our lands are held in such large bodies that they do not offer an inviting field for investment for those having small means, but the time is undoubtedly not very far in the future when subdivision will take place, which will greatly facilitate the increase of population in this vast and rich section and will contribute to the upbuilding of all interests concerned. As you are perhaps aware, there is no more productive soil on earth than the lands of this Delta. They can be bought for \$50

an acre, and will produce any crop that can be grown elsewhere. All kinds of vegetables and fruits reach great perfection in this country, and it seems to be an ideal location for truck farming, as it has direct connection with Chicago by rail, and it seems to us that it presents a most inviting field to those who are engaged in this line of agriculture and who are at present operating high-priced lands or lands for which they have to pay very high rental. We would state that rents for lands in this section vary from \$3 to \$7.50 per acre. The financial condition of our farmers or planters is not improving. There are many causes for this, but the question is entirely too complicated to discuss in a communication of this nature, nevertheless it is a fact. At this time our section is resting under the apprehension of the invasion of the Mexican cotton boll-weevil, which will prove quite disastrous to current conditions, but will eventuate in more sane methods of agriculture.

MISSOURI.

H. B. Topping, vice-president and manager Kingman-Moore Implement Co., Inc., Kansas City, Mo.:

The high prices of grain have stimulated the farmers to plant a large acreage of spring crops, and this has made a lively demand for farm implements. There is nothing but winter wheat raised in this section of the country, and the crop in the main is looking good, and promises to be a good height. The farmers in this vicinity are in good financial condition, better than ever before, and methods of farming have been greatly improved, and there has been a large immigration into this territory, principally from the older States—Ohio, Illinois and farther east. In some sections of Central and Western Kansas there are large settlements of Russians. They make good farmers and good citizens.

Blank & Hauk Supply Co., St. Louis:

One of the machines that we manufacture for the farmers are cream separators, on which the demand is continually growing, especially in the South, and there will have to be lots of preliminary and missionary work done to introduce these machines, although we look for a good season this year, and expect to see an increase every year.

John D. Manley Implement Co., St. Louis, Mo.:

We find business conditions rather inactive, much more so than we were led to expect at the commencement of the season, and cannot account for this. It seems that every one of our dealers are buying from hand to mouth, as the saying is, principally for the reason that they are expecting a considerable decline in prices next season, and are afraid to carry anything over. As to diversified agriculture, there is very little change made in our territory, except in small sections, which are being affected by the discovery of oil, coal and gas; usually the same crops are rotated—wheat, corn and small grain. Very little of the territory we handle raises much cotton, and we do not go down very far in cotton sections. The financial condition of the farmers in this vicinity has never been better in our memory. We cannot say that the general agricultural interests are improving any, except in so far as the farmer seems to be getting more prosperous, and is almost entirely out of debt and free of mortgages. Farming methods have been improving steadily for several years, and every improvement of consequence in farming tools and machinery is being exploited as soon as put on the market. There are no new people coming into this section, as we are almost filled up, and no room for immigrants. There is a tendency toward increase in

value in farm lands; in fact, considerable of an increase where the land is productive, but this is not due to the incoming of settlers from elsewhere; it is due to the better financial condition of the farmers.

Henry L. Whitman, president Whitman Agricultural Co., St. Louis, Mo.:

The trade is better generally throughout the South and West this year than it was last year, although it is far from being equal or up to that of 1907. We are anticipating a very much better trade this season than we had last year in all lines. In regard to the financial condition of the farmers throughout the Southern and Western States, we think they are in far better financial condition than they ever were before, as they have received good prices for their products, and particularly in the West, where they have been carrying mortgages, they have been wiped out in many instances and reduced in others. We think in the South they are introducing many more farming implements, and so far this season we have had more inquiries from the South than ever received before. As you are aware, a great deal of vacant land has been taken up in the last few years throughout the West. Many immigrants are coming in, and this has had a tendency to advance the price of land generally. We have had quite a large immigration into the State of Missouri in the last few years, and a good class of farmers,

T. N. Funston, general agent, St. Louis, Mo., International Harvester Co. of America, Inc., Chicago:

The sale of agricultural implements in this territory this spring has been very satisfactory, generally speaking. There are some lines, of course, that are not up to the average, but while this is true, other lines have gone ahead of the average sale. There is no question but what diversified agriculture is on the increase in this part of the territory. The farmers who used to raise grain exclusively are now raising stock and engaging in dairying. The financial condition of the farmers in this vicinity as compared with other years is A1. The writer has been in this market for the past 20 years. There was a time when we did not get over 25 per cent. cash on the sale of binders and mowers. The past season our per cent. of cash was a little over 86. The agricultural interests of this vicinity are improving, and will continue to improve, as the farmers have come to realize the importance of rotating the crops and using manure on the land as a fertilizer. This is indicated by the very large increase in the sale of manure spreaders by our company. While there are quite a number of farms changing hands, yet there are very few people coming in from the foreign section of the United States. The young generation is coming on and buying land from their neighbors. There is a very decided tendency toward increase in value of farm lands. The past five years will show an increase of 40 to 60 per cent. The increase is due to the better financial condition of the farmers and the increase in our local population.

Co-operative Land & Mercantile Co., Kansas City, Mo.:

Our line of business deals exclusively with orders from the factory or owner to forward their goods, so that we are not sufficiently in touch with the selling department to give you the information you desire. We believe, however, that there is not so great a movement of implements this season as usual for other years, which may be owing, however, to the somewhat backward spring weather that has prevailed for some weeks. The farmers in our vicinity seem to be in good shape financially. The only complaint that we know of is that the movement of goods is slow. Agricultural interests of our vicin-

ity are in much better condition, and show marked improvement from year to year, the same being true of the class of tools and implements that are being used. There is an extensive movement through our city to investigate new land West and South. Farm lands have increased in price materially during the past few years, however; we think it is more from advancing price of farm products rather than the coming of settlers from elsewhere. The better financial condition of the farmers themselves, of course, brings them in better shape for holding their crops for the higher prices, which are bound to prevail if they do.

NORTH CAROLINA.

E. A. Cole, secretary and treasurer Cole Manufacturing Co., Charlotte, N. C.:

Our sales on planters and guano distributors are up to the largest sales of previous years. In spite of the rather low price for cotton the past season, we think the farmers of the cotton belt are in better condition than ever before. We manufacture only the highest grade implements, and our experience shows that farmers, both large and small, and renters also, are turning more and more to improved farm implements. They buy the best, even at a higher price, as soon as they are convinced that it will really do the work as recommended. It is our judgment that there is a growing sentiment in favor of raising home supplies and more farm animals. This policy will build up the fertility of our soil and increase the independence of our farmers. Only when Southern farmers diversify sufficiently to make everything needed for the support of themselves and their stock will they be able to control the production, the marketing and price of cotton. Farm lands in the vicinity of our home city are increasing in value, but there are very few new settlers coming in from other sections. Southern farmers have been greatly benefited on account of large numbers of families moving to the cities, to the cotton mills, and to other manufacturing enterprises, and also by the draining away from the farms of large numbers of negroes to the cities, railroads, mines and other large enterprises. This has tended to decrease production and to increase consumption of all farm products. The greatest curse to the South has been cheap labor. It would be a blessing to the South if farm hands could be had nowhere in its bounds for less than \$1.50 per day. By whatever conditions brought about, the increasing wage scale is the most hopeful sign, and it is greatly to be desired that this tendency shall continue for some time to come. Many large farmers and landowners would probably dissent from this, however, but there is no doubt but that it would increase the returns from their lands, and, of course, increase their value at the same time. Certainly all farmers who work themselves, and whose families work on the farm, would be greatly benefited by high-priced labor, because if prices generally would only justify a low-wage scale small farmers could only earn low wages, even though they cultivate their own land.

Brown-Rodgers Company, Winston-Salem, N. C.:

While business has not been as active as we would like, it has been so much better in this immediate section than elsewhere that we have no reason for complaint. The season has been fairly good for the smaller agricultural implements, but has not opened fully as yet for the larger, such as binders, mowers and drills. The tobacco crop has been an average one, bringing good prices. Over 23,000,000 pounds have been sold here, putting into the hands of our farmers a large sum of money and thus making their financial

conditions unusually good. Improved machinery and better methods are surely, if not rapidly, coming into use, and the outlook for our farming country is very promising indeed. Good prices for all farm products prevail without exception. Immigration into this section is not noticeable; if it occurs at all, it is from other sections of the United States or from Europe. There is a marked tendency to higher values for farming lands, arising chiefly, if not solely, from the improved condition of our farmers financially. Cotton is not grown in this part of the State, and there is very considerable diversity in our agricultural products, such as wheat, corn and tobacco, and several of the smaller crops being grown here. The official report of leaf tobacco sales in this market shows so far this season (which ends August 31, 1900) 23,412,072 pounds have been sold, bringing to our farmers \$2,267,293.10 for this crop alone.

TENNESSEE.

W. W. Woodruff, Jr., vice-president W. W. Woodruff Hardware Co., Knoxville, Tenn.:

Our views on the sale of agricultural implements would not be of much value, as we do practically no business in this line. Our builders' hardware trade shows a large increase over last season.

F. E. Lowe, president Lowe-Hord Hardware Co., Knoxville, Tenn.:

We succeeded Messrs. McClung, Buffat & Buckwell on January 1, and are pleased to state that general farm conditions in this section, as far as we are advised, are improving, and farm lands are increasing in value. We haven't time to write you a lengthy letter, but, in our opinion, the prospects for this section in every way were never brighter.

Nashville Warehouse & Elevator Co., Nashville, Tenn.:

We find conditions in the territory reached by our house all that could be desired. The demand for planters and cultivators have been so heavy that it has been impossible for us to keep in stock. Farm products, especially the cereals, are bringing big prices, and the farmers seem to have plenty of money and they are buying better equipment. Farming land in our immediate vicinity has greatly advanced in value during the past year, but there is no unusual influx of new people. There will probably not be an increased acreage of cotton, as the farmers are making strenuous efforts to make more corn on account of the continued high price of that cereal. The result will probably be high-priced cotton next year and cheaper corn, after which the farmer will again drop back to more cotton and less corn.

C. D. Mitchell, president and general manager Chattanooga Plow Co., Chattanooga, Tenn.:

The season just closed we consider a normal one in the South in the sale of plows and agricultural implements. A conservative spirit has prevailed, but there has been no hesitation in buying up to reasonable requirements. Collections have been fairly good, which would indicate that the farmers are in reasonable financial condition and have the confidence of the dealers. We are not impressed that new settlers have been coming into this section and taking up farm lands in large numbers, unless it be in the Southwest. However, there has been a steady return to the farms from towns and cities in the South, because of scarcity of work in the mines and factories, which has increased the acreage cultivated. There is a steady, if not rapid, interest in diversified farming, and a constantly increasing demand for better farm implements. We consider the agricultural situation in the South healthy. A significant fact is that prac-

tical agriculture is being taught in most of the high schools throughout the South, which will tend to keep the boys on the farms and insures intelligent future farming.

W. A. Rockwell, treasurer the Harriman Manufacturing Co., Harriman, Tenn.:

Our sales for the season now closing indicate that about the usual acreage is being planted in cotton this spring. In our vicinity the farmers are in a good condition financially; agricultural interests are improving; better farming methods are in vogue, and the sale of improved farming tools is constantly increasing. The value of farm lands is much higher than it was a few years ago, due more to the improvement of the property and the better financial condition of the farmers than to the incoming of settlers from elsewhere. The work of the agricultural department of the State University is to be highly commended, as its constant efforts to introduce improved methods among the farmers of the State are beginning to show most satisfactory results in many sections.

TEXAS.

J. C. Duke, manager John Deere Plow Co., Dallas, Texas:

The outlook in Texas is far from encouraging, owing to continued drouth, which is general over our entire State. Our sales show an increase of about 30 per cent. over the same months last year, and with seasonable rains we would have unquestionably shown an increase of from 40 to 60 per cent. Dealers are not placing orders at this time, preferring to wait until the outlook is more promising. In many localities corn and cotton have been in the ground anywhere from two weeks to a month, without showing any signs of coming through. The farmer is in better shape financially to stand a bad crop than he has been for years, and despite the unfavorable outlook he is not complaining seriously, and if we should have a general rain during the next 10 or 15 days it would do much to restore normal conditions and confidence in the future.

John J. Ross, manager Kingman Texas Implement Co., Inc., Dallas, Texas:

The trade condition in Texas at the present time, so far as implements and vehicles are concerned, is unfavorable. The State generally has not had a good soaking rain for nearly five months, and as a result the prospects for even a normal crop this year are not at all flattering. There is, or was up to a few months ago, considerable immigration coming into West and Northwest Texas, most of the newcomers being from the North.

J. M. Wendelken, manager Emerson Manufacturing Co., Dallas, Texas:

The business conditions in Texas are, on the whole, fairly satisfactory in all lines. While there is more activity in some than in others, in either case it is due to local conditions. In some parts of the State there have been good and seasonable rains; in other parts there has been so little rain that the crops planted are not doing well. Conditions as to rains are peculiar, in that there has been no general rain, but in limited areas only. In the southwestern and western districts fears are expressed that crops will be cut short. These conditions have unfavorably affected the trade in vehicles more than in implements. The financial condition of the farmer is more or less affected by local conditions. In districts in which good crops were made last season he is ahead of the game; in others he is "hoping" and praying it will not happen again. In a good year he buys freely; in a bad year he gets along with less. Farming methods are in a general way improving, and the tendency is to buy the better grades of im-

plements. The new people coming in appear to be from the Northern States and from the Northwestern States. Perhaps 25 per cent. of them are from the Southeastern States; very small proportion from Europe. Farm lands are increasing in value throughout the State, partly due to the new settlers, and, of course, depending on nearness to market to a large extent. That, however, is so elsewhere as in Texas. Within the last 10 years there have been a very marked improvement in the financial condition of the farmer, a great increase in the cultivated area, and a very marked increase in land values.

Joe E. Johnston, Joe E. Johnston Company, Dallas, Texas:

Business is rapidly getting better in this section of the country, although we have had a drouth on us for some time, yet the indications are favorable for a rain, and looking at it from a business standpoint, we are expecting a good trade this year. Money seems to be pretty plentiful, and the farmers, as a rule, are pretty well fixed financially. Prices for farmers' products have been very good for the last four or five years, and seem to be advancing. Corn is now selling at 90 cents, oats at 70 and wheat at \$1.50. Cotton is bringing a pretty fair price, somewhere near 10 cents, and with these prices and with the crops that we have been raising for the last few years we know no reasons why the farmers should not be prosperous. Our farmers have been diversifying for a number of years. Up to about 10 years ago the only crops we raised in Texas were corn, cotton and wheat, but now our people are raising hogs, poultry, strawberries, peaches, peanuts, and most any crop can be raised in Texas. There is quite a good deal of immigration to our State, and plenty of room for more. They are coming from the Old Country, from the North, East, and from most every part of the country on the globe; notwithstanding all of this, we have plenty of room for all progressive, wide-awake people, and anyone coming to this State who wants to hustle will soon have a comfortable home. Farm lands are rapidly advancing, some as high as \$100 an acre, while a great deal of good productive land can be purchased at anywhere from \$5 to \$15 per acre, according to locations. There are very few crops that cannot be raised successfully in Texas, which our people are just finding out, besides the markets are getting better yearly. Our farmers are beginning to ride in automobiles and all kinds of rapidly moving vehicles. This ought to indicate their prosperous condition.

J. B. Adoue, president Adoue-Blaine Hardware Co., Houston, Texas:

As we don't handle anything in agricultural or farming implements, excepting hand tools, we are not in position to give you very much information. We, however, can advise business with us has shown a steady increase each month, our February and March sales being heavier than November and December business, which is something we have never experienced before. Collections so far have held up remarkably well, very much better than they ever have at this season of the year. We have no advice as to increasing acreage in cotton. The entire State, however, has suffered considerably with the continuous drouth, which has in the past week been broken in one or two sections. We know of no great farming development, except in South and Southwest Texas; in other words, in what is known as the coast country. This territory is being settled up very rapidly by a farming element from Central and Northwestern States, and by higher class of farmers who have money to buy land and develop it. Lands in what is known as the Brownsville country which two or three years ago sold for \$1 per acre

cannot be bought now for less than \$100 to \$150 per acre. This is due entirely to irrigation, the products being principally truck farming or oranges and figs. The above conclusions are arrived at by a recent personal visit over this territory by the writer, and we trust it will be of some service to you in making up your report of conditions and development in this section.

R. Seeley, secretary Heusinger Hardware Co., Inc., San Antonio, Texas:

We have had a very dry spring here, which has retarded trade somewhat, but the recent rains, we believe, will revive trade considerably. While cotton is still cultivated extensively in this section, it is by no means the only product, as experiments have shown that other crops can be successfully made, and there is an increasing interest in diversified agriculture. New people are continually coming in and taking up land. Some of these people are from Europe, but the greater portion are from the Middle States. The consequent increase in the demand for land, the fact that more of it is being put in circulation, and the further fact that newly cultivated lands previously unused have shown the soil to be good for farming, have increased the price of the land. As to the methods of the farmer, he knows the value of time and labor-saving tools, and whenever his means will permit he provides himself with such tools, and regarding the farmer's financial condition, we consider it good.

C. H. Dean, San Antonio, Texas:

Business in this section has during the latter part of the winter and the entire spring been extremely dull, owing doubtless to the protracted drouth we have been going through, which, though broken in parts, has not been broken all over Southwest Texas as yet. Naturally, when we have a very hard drouth to go through our farmers lose the greater part of their small grain crops, the early vegetable and in some cases the corn crop, or at least the early crop or money-getter. The farmers in this section are very poor financially, and I find that about 75 per cent. of my customers who bought goods to be paid for in the latter fall or early spring have to have a part carried over until next fall. Agricultural conditions in this section are materially improving every year, as a great deal of new ground is being put under cultivation and many acres under irrigation, while the methods are becoming more up to date and economical. Vast trainloads of homeseekers are pouring into this part of the State, and our big ranches of hundreds of thousands of acres, hitherto in open cattle ranges, are being cut into small tracts and sold to farmers from Missouri, Kansas and the Central Western States. This naturally enhances the value of farm lands, and property which I bought three years ago at \$50 per acre is a bargain today at \$150 per acre. Other lands are in proportion, as is city property in this city. Summarizing the whole proposition, though money is scarce with the farmers now here, there is lots of it coming in and a pretty steady market for it here, there being so many good chances for investment, real estate being about the most active article on the market. I know of one piece of property in this city which sold on Saturday for \$5000; the buyer sold it Tuesday for \$6000, while this buyer sold it the following Monday for \$9000, though that is an exceptional instance.

John H. Bond, president Bond George Hardware Co., San Antonio, Texas:

While a protracted drouth has greatly retarded business in all Texas, making business and collections far lighter than they would have been otherwise, the general condition of the country was never better, nor the future outlook brighter; in fact, every quarter for the past five has shown us a handsome increase over that

preceding in volume of business. The one drawback to this country has, like most new countries, been lack of capital. The banks, farmers, merchants, have been forced by the Eastern panic to join the ultra-conservative class, with the result that it has made shoes pinch in a good many places. Great floods of new settlers have been coming in, and lands a few years ago that only sold by the hundred thousand acres at about \$1 an acre have been proven by irrigation (water to be gotten anywhere by boring) to bring incomes from the earliest vegetables in the United States of from \$300 an acre up to three times that much. These lands are being cut up everywhere and sold off to settlers at from \$15 to \$100 an acre. Even without irrigation this land is making as good cotton land as almost any in the State, and the profits are fast working out the settlers. These are coming from the North, Northwest and Northeast, as well as Europe. As they pay from a third to a half down on their land purchase, giving 8 per cent. notes at from one to five years for balance, secured by the land sold, and then develop the land, it makes first-rate notes, yet as there are so many of them afloat here, most of the operators have to carry them themselves, as much as it would be to their advantage to help out the Eastern lender, who has to be content with his 4 or 5 per cent. land loans. With a greater market for these notes the development of this country would go on much faster; in fact, after being a commercial traveler for over 12 years over most all of the South and Southwest, I can say I have never yet seen as great a variety of openings as there are here for capital, nor a country where loss can be as quickly recouped; and while I have no axe to grind, it would be a pleasure to show anyone interested more in detail what this country really offers. In San Antonio in past two years realty has on an average fully doubled, even in spite of the general financial condition of the country in general, and building records have been up among the leading cities. On the whole, our outlook is very bright, even not counting the rain falling today in time to save cotton.

VIRGINIA.

George J. Freedley, vice-president and general manager the Cardwell Machine Co., Richmond, Va.:

Our spring sale of agricultural implements has increased, and shows improvement in regard to diversified agriculture. The farmers are in better financial condition. New people are constantly coming in, taking up Virginia farm lands, from both North and West, as well as Europe.

Manfred Call, the Call-Watt Company, Richmond, Va.:

Our business is devoted principally to manufacturing plows for the Southern trade and road machines. In these lines the demand has been all and rather more than we have been able to handle, having been behind our orders now over six weeks. Judging from collections, the sections into which our products go must be in a good financial condition. As to local conditions, we think that of the agricultural interests is constantly improving, more labor-saving implements being used and farming operations conducted under improved methods. Many new settlers are coming in, some foreign and a large number from the North and Northwest. We are not in a position to give an opinion as to relative values of farming lands, but so many farms are being bought by newcomers it stands to reason that values should increase.

WEST VIRGINIA.

The Foster-Mead Hardware Co., Huntington, W. Va.:

We have had a very active spring business on all agricultural implements, hav-

ing sold out our original purchases, and have reordered several times. In this immediate vicinity the demand for agricultural implements is no doubt occasioned from the fact that a large amount of tobacco is being planted this year here. Will also state that our farmers, as a general thing, are the most prosperous people we now have, on account of the inactivity of the manufacturing interests. We also have had demand for a better class and a newer class of farming machinery than we have every had before. As to the increased cost of farm lands, will say that we haven't noticed anything of this kind, neither is there any new settlers locating in this immediate vicinity.

C. D. Diesne, Parkersburg, W. Va., office International Harvester Co. of America, Inc.:

Conditions are good, and trade is coming along nicely. The financial condition of the farmers in our territory, as compared with other years, seems to be as good, if not better, than it has been, as the farmers, as a rule, have money and are making money right along each year. The farming methods are bound to improve with the improved implements that the farmers are purchasing. New people are not coming in to any extent, like they would in an unsettled country. Farming lands are not increasing in value to any noticeable extent, although desirable land is going up to a pretty stiff price. Conditions look good for a very favorable trade this year, and we believe the general feeling throughout the territory is that things are going to keep brightening right along.

Birmingham Iron Market.

[Special Dispatch to Manufacturers' Record.]
Birmingham, Ala., May 4.

A careful and conservative estimate of the sales of iron during the past six weeks places them at or around 400,000 tons for all deliveries this year. Some estimates go as high as 500,000 tons. The smaller estimates are very conservative. There have been sales today of round lots on the basis of \$11.50, one lot being for 5000 tons. The Tennessee Company has practically closed down the steel mill for lack of orders, but the suspension is regarded as only temporary.

The price of iron today is reported at basis of \$11.50, but one can buy yet on a \$11 basis. Sales have been made this week on that basis for shipment this month. A fair quotation would be at \$11 basis for spot shipment and \$11.50 for last half this year.

The Alice furnace will be blown in this week, and the furnaces in blast will make dashes to meet requirements. The outlook is for an even, regular and steady market, free from exciting causes. The large sales made take the element of speculation out of the market and put it on a legitimate basis.

J. M. K.

Another Portland Cement Plant.

The MANUFACTURERS' RECORD is advised that the Southern Development Co. of Oklahoma City will build a Portland cement plant in Eastern Oklahoma. This plant will include buildings of fireproof construction, rotary kilns with oil burners, soft-coal producer-gas apparatus, etc., for manufacturing 1000 barrels of cement daily. C. B. Blake, Weatherford, Okla., is the company's secretary and architect in charge, and is attending to all correspondence. C. F. Eberle, Deer Creek, Okla., is the company's president.

A stock company has been formed at Greenwood, Miss., and has purchased 1850 acres from the George estate, which it proposes to settle with German-American farmers.

New Orleans: Most Striking Example of Land Reclamation in the United States.

By O. W. CRAWFORD.

[Written for the Manufacturers' Record.]

Every acre of land in New Orleans has been reclaimed. It has been diked and the water inside the dikes pumped out over the dikes. This being a fact, every citizen of New Orleans must be a believer in the feasibility of reclaiming Louisiana wet lands.

All of the land on which the city stands today has been under water thousands of times; it was built up out of the water by sediment deposited by the Mississippi River.

A city could have been made as easily at any point between Donaldsonville and the Gulf of Mexico. Much of the land in the city now covered by houses is below the sea level. Lake Pontchartrain is sea level. Whether the land is three feet below the level of the sea or three feet above the level of the sea makes no difference in reclamation except in cost. The operation is the same.

For a man who lives in a house in New Orleans on a lot one foot above sea level to say prairie land 25 miles from the city, seven feet above sea level, cannot be reclaimed, or that the location is more unhealthful, argues that he is talking without thought or is trying to put the fool upon the person with whom he is talking.

The great city of New Orleans is a complete demonstration of the feasibility of reclaiming Louisiana wet lands.

The part of the State lying south of a line drawn through Lake Charles, Donaldsonville and Lake Pontchartrain must be reclaimed. It is the part out of which New Orleans has gotten the most in the past and will get the most in the future.

In this "Nazareth" of Louisiana drainage and reclamation mean the same. All of this territory now producing has been drained. The cost of reclaiming the balance of it is the only question to be considered—feasibility has been established.

Is the game worth the candle?

What does this territory contain?

One-quarter of the State.

The cities of Lake Charles, Jennings, Crowley, Lafayette, New Iberia, Morgan City, Houma, Thibodaux and New Orleans.

Seven-tenths of the manufacturing of the State.

All of its sea coast.

The entire line of the Intercoastal canal.

All of the rice production.

Two-thirds of the sugar production.

All of the commercial fish business.

All of the oysters.

All of the shrimp.

Sixty per cent. of the cypress production.

Nearly all of the oil production.

All of the salt production.

All of the sulphur production.

Seven-tenths of the commercial truck farming.

Eleven thousand square miles of rich and fertile land.

Of this 11,000 square miles, 7000 square miles, or 4,500,000 acres, is the richest alluvial land in the world. This is the district from the Atchafalaya to Lake Borgne.

Its importance at present may be faintly measured by the above enumeration of only the largest of its possessions.

Its future is beyond estimate, for no man is qualified to measure its productivity when drained, and no man knows what its development may discover.

What it needs:

1st. A comprehension of its great possibilities.

2d. A good drainage law—a law permitting assessment for enough to drain the land and drainage districts small enough to permit communities to vote a tax large enough to drain their own lands.

3d. The State to dig large drainage canals straight to the Gulf and to straighten and deepen many bayous which today are useless for drainage.

Mr. Edward Wisner is perhaps more extensively engaged in reclamation than any other man in the State.

Appreciating the opportunity for great profit, he invested largely in the wet lands contiguous to New Orleans. He bought them cheap, but with the full knowledge that in his hands, without drainage and development, they were worth not one cent more than when they belonged to the State. He has induced friends in his former home to join him, and they have spent nearly a quarter of a million dollars of outside money in draining and developing the almost valueless lands which his foresight caused him to buy. This work of reclamation is being extended rapidly.

At present there are six dredges at work digging canals and two more building. There are more than 100 men interested in the Wisner lands; more than 60 of these men are putting money into canals and ditches and pumps. Besides these, nearly 100 families of farmers from the North and many from Louisiana are living on reclaimed land, and more coming all the time.

Fifty thousand dollars has been spent by Mr. Wisner and associates in Northern newspapers and magazines in advertising and in sending salesmen and agents to reclaimed districts in other States to induce people acquainted with reclamation to investigate personally the conditions in Louisiana; also to dredge contractors and manufacturers of reclamation machinery. One result has been that new machines for canaling, ditching and plowing these lands have been invented and are being manufactured and used in reclaiming wet lands.

It is Mr. Wisner's intention to institute a series of free excursions to the reclaimed lands in the different localities in which his operations are progressing, so that the business men, ministers, professors and schools of New Orleans may see and understand what is being done.

Mr. Wisner's work in reclamation will indelibly write his name in the development history of the peerless State of Louisiana.

New Orleans, La.

Phillips Co. to Expend \$1,000,000.

The MANUFACTURERS' RECORD has received authoritative advices of the plans of the Phillips Sheet & Tinplate Co. of Clarksburg, W. Va., for building an additional plant. This will be located at Hollidays Cove, and with its accompanying improvements will cost about \$1,000,000. The company has begun the construction of an eight-mill plant for 12 sets of cold rolls and all equipment for manufacturing sheet and tinplate. All buildings will be of steel, brick and concrete construction, constructed under the company's direct supervision, and proposals for machinery should be sent to George Mendel, the company's purchasing agent. This new mill will have an annual capacity of about 25,000 tons. The improvements will include dwelling-houses and betterments for a new town which will be called Weir City. E. T. Weir is president of the company.

IMPETUS FOR BATON ROUGE.

On the Eve of a New Era of Industrial Activity.

[Special Cor. Manufacturers' Record.]

Baton Rouge, La., May 1.

What the advent of the Standard Oil Co., with its \$2,000,000 refinery at Baton Rouge and its \$3,000,000 investment in pipe lines from the Caddo and other Louisiana oil fields and from the oil fields of Oklahoma and possibly Kansas, will fully mean to Louisiana is a matter on which there has been no crystallizing of opinion and concerning which the official family of the Standard Oil Co. of Louisiana do not attempt to indulge in forecasts. These officials are confining their activities and their thoughts to the immediate work in hand, which consists of pushing with the utmost vigor the clearing of the 212-acre tract on the river two miles north of the city, on which the refinery is to be constructed by the first of January, if possible, and in working out the physical plans for the great enterprise. How the advent of the company will operate as a stimulus to the broad, general development of the section and the State at large in an industrial way is a proposition which will be gradually unfolded as time goes on, according to the views of all those with whom I have had any conversation.

However, it is palpable to anyone that there must be a new era of industrial activity established on the heels of the enterprise, through not only the great advertisement this gives to Louisiana's resources, to its shipping facilities and its advantageous location, but because of the increased facilities and opportunities that will be provided for profitable endeavor in many lines new to Louisiana.

For instance, there will be a residue from some of the refining processes that will be sold as fuel oil, and doubtless the price will be such and the supply sufficiently stable to justify a very general use of fuel oil by factories. With cheap fuel there would be possible the development of a wide line of chemical industries, based on the enormous salt and sulphur deposits of Louisiana, in accordance with suggestions contained in the remarkable article by Dr. David T. Day, United States Geological Survey, in the MANUFACTURERS' RECORD of January 7, in which he pointed out that in the vicinity of New Orleans there should be built up the greatest chemical industry, in all lines that salt and sulphur enter into, which the world contains.

Then there are the multiform industries that grow out of the utilization of oil products, which ought to be developed in the New Orleans section. These include paraffine products for candles and every purpose for which wax was once employed, and lubricants, oils, axle grease, etc., constituting a number of industries which ought to add materially to the industrial importance of Louisiana.

But whatever may be the ultimate industrial development, Baton Rouge has received a remarkable stimulus, and the attention of the country has been called to the potentialities here in a way that Baton Rouge never knew before. Real estate has enhanced in value very greatly, and the leading progressive spirits of the city count on a development that will early give a population of several times the twentyodd thousand of today.

While there are those who consider that the Standard Oil Co. might to much better advantage have made a selection of a site at New Orleans, as at one time it was thought likely, yet those of Baton Rouge who have studied most thoroughly the progress of railroad development here unhesitatingly declare that the decision to come to Baton Rouge was simply a recognition of the advantages Baton Rouge

offers today as the site for a vast industrial and commercial development, and it is the belief of these people that as an important trading and manufacturing center, and a great railroad and steamer shipping point, Baton Rouge is destined to grow by leaps and bounds within the immediate decade.

Until a few months ago Baton Rouge was a typical slow-going capital city, with a fine university, a pleasing site and one branch railroad. It was off the main line of travel, so that to go to Baton Rouge involved a special mission and a serious purpose. Under such circumstances development of all kinds was slow, and the spirit of hustle did not obtain. The spirit that prevailed is well illustrated in the surprise one of the leading business men expressed when in seeking an interview with one of the officials of the Standard company recently a definite appointment for a given hour on the following day was made. "The idea of time making any difference is an innovation here," he mentioned in referring to the matter later. "We had never before encountered anyone in business here whose time was so taken up that an appointment for a business interview had to be made for an exact hour."

It is still true that there exists a considerable element in Baton Rouge which is not disposed to regard seriously the attempts that are being made by the Baton Rouge Board of Trade and the enterprising citizens generally to change the old system, which involved a more or less care-free existence, with business beginning at 9 o'clock and a general return to home occurring about 4 P. M. There is a good deal of indifference to the possibilities for enterprise which have been opened up, and it will take some time and some new people to transform Baton Rouge into a really live wire.

And yet, with the recognition of the strategic importance Baton Rouge possesses, it is the confident belief of those who have carefully studied the situation that Baton Rouge is inevitably destined to become a great city, and that nothing can now prevent her growing into an important seaport as well as a commercial, trading and manufacturing center.

Until two years ago Baton Rouge was on a branch line of the Illinois Central, running between Memphis and New Orleans for the benefit of the river trade. It was an out of the way point, with no chance to get any through business, and with no outlet to the East or West. Now, the most important trunk lines in this territory are headed this way; some of them are in operation, and before fall all of them will be running. The Louisiana Railway & Navigation Co., the private enterprise of Wm. Edenborn, is running through trains between Shreveport and New Orleans via Baton Rouge. The Illinois Central, by the purchase of the Baton Rouge, Hammond & Eastern, now gives Baton Rouge a connection with the main line of the Illinois Central at Hammond. The Texas & Pacific, formerly of no benefit to Baton Rouge, now gives a direct connection with St. Louis via the new Gould water-grade line, which runs between Baton Rouge Junction with Ferriday, and by constructing a seven or eight-mile connecting link between Ravenswood and Morganza all the Western freight traffic of the Gould systems could be brought into Port Allen, across the river from Baton Rouge.

The Rock Island-Frisco-Carrollton Southern interests will be ready to run trains into New Orleans via Baton Rouge by June or July. The Colorado Southern line has been built between Anchorage and West Baton Rouge, and arrangements have been made for the use of the tracks of the Edenborn road from there into New Orleans. At DeQuincy the Colorado

Southern takes the tracks of the Kansas City Southern into Beaumont, and between Beaumont and Houston they have their own road, the Beaumont, Sour Lake & Western, a five-mile shorter track than the Southern Pacific between those points. This road has been in operation for some time between Opelousas and Houston. At Eunice the Colorado Southern connects with the Chicago, Rock Island & Pacific line, running from Little Rock south, and this line will give an advantageous freight connection for Baton Rouge.

Of hardly secondary importance to any of the railroad developments that have been made is the construction by the Southern Pacific of its Baton Rouge-Lafayette cut-off. The track on this line has all been laid between Lafayette and Atchafalaya River, and the grading is well under way between the river and West Baton Rouge. The terminals are at West Baton Rouge, one-half mile south of the Colorado Southern's. The new line will be 52 miles in length, and will undoubtedly be largely used for the westbound freight business brought south over the Illinois Central, as by going to New Orleans there would be a haul of 190 miles, as against 97 miles by diverting the traffic at Hammond via Baton Rouge and the Lafayette cut-off.

There is a belief here that the Santa Fe will come into Baton Rouge, as the branch line of the road in operation between Kirbyville, Texas, and Oakdale, La., has an extension of 10 miles eastward from Oakdale under construction, so that the line is palpably headed in this direction.

It is considered likely that the Liberty-White road will extend its line into Baton Rouge, giving a second Illinois Central connection at McComb City, 50 miles distant.

A survey of the Atlanta, Birmingham & Atlantic has been made into Baton Rouge. Its extension to this point may hardly be considered as otherwise than a remote possibility, although it would be a great tap-line road, intersecting all the north and south roads of the South Atlantic seaboard.

No definite plans have been formulated for a bridge across the Mississippi at Baton Rouge, but on account of the railroad development here and the favorable situation for bridge construction, it is regarded as inevitable that a bridge will ultimately be constructed here—the first south of Memphis and the only one likely to span the Mississippi in this vicinity for a long time to come.

There are 30-foot bluffs at Baton Rouge, the first occurring to the north from the mouth of the Mississippi, and they extend for 10 miles up the river from here. This is one fact entering into the probabilities of bridge construction here. It is also one of the reasons why the Standard Oil Co. chose a site here, for oil from the refinery may be loaded into export ships by gravity.

With 45 feet of water, minimum, in the mile-wide stream here, it is the expectation of the Baton Rouge optimists that this will become a port for oceangoing vessels, not only for Standard Oil purposes, but for general commerce as well. By rail the distance between Baton Rouge and New Orleans is: Louisiana Railway & Navigation Co., 80.4 miles; Yazoo & Mississippi Valley (Illinois Central), 89.7 miles; Texas & Pacific, 98 miles. It is contended that the saving in railway haul and return empties will force the building of an export port here, and that in time a large part of the export business now delivered to ships in New Orleans by the lines entering and to enter Baton Rouge will take the ships at Baton Rouge.

In an industrial way, as in all others, Baton Rouge is merely at the beginning of development. Situated in the midst of

a fine hardwood timber district, there is only a slight utilization of these resources. The Standard Box Co. makes boxes of all sorts, principally for packing-houses, which are sold to Armour and Swift at Chicago, Omaha, Kansas City and Fort Worth. The Baton Rouge Veneer Works make egg cases principally, which are shipped out by the carload and are sold all through the North. Both these establishments use gum and cottonwood principally.

There is a well-established oar factory, and there are concerns engaged in lumber production, but there are no furniture factories or general woodworking establishments, and yet within sight of the highest office buildings of the city there are forests of oak, cypress, gum, ash and cottonwood, and just beyond are pine and beach.

There is an oil mill for making cottonseed products.

A cannery factory with \$25,000 capital has just been established with local capital to can fruits and vegetables, especially sweet potatoes, and probably tomatoes. It will start operations this spring.

There is a company organized to build a large factory to make stock feed by utilizing the by-products of sugar plantations and of the cotton-oil mills in connection with alfalfa, lespedeza and corn.

Baton Rouge is in the center of a very rich agricultural region. Cotton and cane figure largely in agricultural products, but on account of the boll-weevil pest there is a 40 per cent. reduction in the amount of cotton planted this season in all the territory as far north as Vicksburg and west to Shreveport. What will doubtless prove a very beneficial diversification of crops is taking place, the farmers going more largely into the planting of corn, oats, alfalfa, lespedeza, Bermuda grass, etc., as well as vegetables and truck.

A local company has been organized to bore for oil and gas in the Deerfield district, 15 miles from Baton Rouge. If developments are successful, this will mean vast advantages to Baton Rouge. But in any event, Baton Rouge is to be a main station of the Busch-Everett-Walker natural-gas enterprise, and at least as favorable terms as are offered New Orleans will prevail. It is the expectation that this will prove an added factor in industrial development here. Industries already giving consideration to Baton Rouge through the Board of Trade are a knitting mill, an overall factory and a furniture factory.

An extensive street-car system is assured here through the purchase of the present system by the Stone & Webster syndicate not long ago.

Baton Rouge has wonderfully fine artesian water, of seemingly inexhaustible quantities. The city is supplied by two flowing wells, and the water, of crystal clearness, analyzes 90 per cent. pure.

With its splendid university, its capital city social life, the abundance of cheap fuel assured, the proximity of all kinds of raw material and the railway and transportation facilities now possessed, it is felt that even a moderate degree of enterprise and hustle will attract a large population of investors, upbuilders and workers to the city very soon.

ALBERT PHENIS.

The board of directors of the recently chartered Chamber of Commerce of Lynchburg, Va., elected last week Messrs. C. G. Craddock, president; E. P. Miller, vice-president; Walter E. Addison, secretary, and C. E. Vaughan, treasurer. Messrs. Craddock and Miller, with R. O. Horton, H. E. McWayne, Ernest Williams, W. J. Almond and D. B. Ryland, constitute the executive committee. A business secretary of the organization is still to be elected.

NEW BERN WILL EXPAND.**Determined to Realize Upon Its Advantages for Industry and Trade.**

[Special Cor. Manufacturers' Record.]

New Bern, N. C., April 30.

New Bern, settled nearly 200 years, and a thrifty city of 16,000 inhabitants, realizing the possibilities afforded by its location, soil fertility, proximity to raw materials and its climate, is planning an active campaign to make these known to the prospective manufacturer and homeseeker. A Chamber of Commerce was organized several months ago with the following officers: W. B. Blades, president; L. H. Cutler and H. W. Armstrong, vice-presidents, and W. G. Boyd, secretary. This organization is engaged in furthering the city's interests by aiding capital to find remunerative investments, thereby leading to a broad expansion of trade and commerce.

Peninsular in shape, the city is situated at the confluence of the Neuse and Trent rivers, both of which are broad, picturesque bodies of water alive with fishing craft and oyster boats. Its location and its transportation facilities give New Bern great advantages for manufacturing and trade. It is already an industrial and commercial center of no mean proportions.

The principal industries here are lumber, fertilizers, fish and oysters and agriculture.

Thirty manufacturing plants flourish here, among them being nearly a score of lumber mills manufacturing North Carolina pine and other varieties of native timber, such as ash, cypress, poplar, oak, maple and gum. The daily capacity of these lumber mills is about 630,000 feet from an annual cut of about 175,000,000 feet, employing possibly 5000 hands. On one day this month 2,000,000 feet of lumber were shipped from here by vessels and barges alone. The John L. Roper Lumber Co.'s new mill, which is about finished, will be operated by electricity. This mill, which cost about \$250,000, has a capacity of 125,000 feet a day, and will employ 300 persons. The plant was tested this week. The company is already operating here a mill of 75,000 feet daily capacity.

About 75,000 tons of commercial fertilizers are manufactured here yearly, and about 25,000 tons more are distributed by outside companies which have warehouses here, making a total of 100,000 or more tons, valued at \$2,000,000, that are actually handled here in the course of a year. The erection of another large fertilizer plant is under advisement.

Other industries here include a beverage plant representing an investment of \$145,000 and doing business in 38 States, agricultural implement factory, barrel, crate and basket factory, meal, hominy and feed mill, carriage factory, iron works making boilers, machinery and iron and steel articles in use among the mills here, ice factory, drug factory, liniment factory, poultry supply factory and book-bindery. The Norfolk & Southern Railway Co.'s shops, employing 100 men, are here, and \$60,000 were recently appropriated for an enlargement of the shops and the installation of new machinery. The Carolina Paper Pulp Co. is about ready to begin the manufacture of pulp and paper from gum and pine woods.

There have been exhibited at New Bern fairs more than 80 varieties of sea food caught in neighboring waters, such as Spanish mackerel, blue fish, trout, shad, drum, sturgeon, mullets, herring, perch, flounders, sheepshead, etc., with 19 varieties of oysters, clams, crabs, scallops, mussels, sea turtles, terrapin and shrimps. Fish are plentiful all the year around and oysters are cheap and abundant in eight months. During the past year 75,000 packages of fresh fish packed in ice were shipped, and in that industry are employed

fully 2000 persons and a large number of sailboats and launches. In the season just closing 30,000 bushels of oysters were handled here, of which about 15,000 bushels were shipped and the remainder were consumed in this city, being retailed at the door at 15 to 40 cents a quart and at 40 cents to \$1 a bushel in the shell, according to quality.

New Bern is a center of the great cotton, lumber and agricultural belt of the South Atlantic seaboard. About 4000 acres of rich and productive soil is under cultivation in this section, and with a growing season of 221 days three or four crops may be cultivated in a year. The temperate climate, which ranges from an average of 40 degrees in January to 75 degrees in July, permits of plowing in all four seasons. April 3 is the average date of the last killing frost in the spring, and November 10 of the first in the fall. About a third of the land under cultivation is devoted to the growing of early truck, and during a good season between 1,000,000 and 1,500,000 packages of vegetables, of which 100,000 barrels are Irish potatoes, are shipped to the North. After such early crops as peas, cabbages, beans, Irish potatoes, radishes, onions, kale, spinach, cucumbers, beets, lettuce, strawberries and asparagus are off, the staple crops, such as cotton, corn, oats, cowpeas, sweet potatoes, watermelons, cantaloupes, savoy beans, rutabagas, turnips, clovers, etc., are cultivated.

Alfalfa grows luxuriantly in this section, and yields five and six cuts annually. An interesting branch of agriculture which is carried on here successfully is the cultivation of lettuce for the winter market. Large quantities are grown by means of artificial heating and irrigation, and afford remunerative returns. One farm, a couple of miles from the city, raised last year, besides many other things, 40,000 bushels of cucumbers and two crops of oats, peas and cantaloupes. Twenty-two acres are under irrigation and 16 are equipped with steam-heating apparatus. The stock includes 40 cows, 300 hogs and 100 lambs and sheep.

Native grass, making nutritious hay, will follow any crop. Cattle, mules, horses, hogs, sheep and poultry of all kinds are raised with ease and profit.

By railroads there is a double service daily in all directions, six hours to Norfolk, 10 hours to Richmond, 20 hours to New York and one hour only to the Atlantic Ocean. New Bern is served by the Wilmington division of the Atlantic Coast Line, and is the terminal point of the Norfolk, Goldsboro, Beaufort and Oriental divisions of the Norfolk & Southern system. The latter is building a viaduct across Albemarle Sound about five miles long, which should be in operation about the end of the year. A survey has been made by the Atlantic Coast Line with a view to connecting its Wilmington and Norfolk divisions at New Bern. This would require about 20 miles of construction, would open up a fertile section of Eastern North Carolina and give the products of New Bern an outlet to the North by two good systems.

Completion of the inland waterway between Norfolk and Beaufort, giving 12 feet at high water and 10 at low, and running from Pamlico Sound into Neuse River and into Adams Creek, 17 miles from New Bern, will give this city outlets to the ocean by inland water, both at Beaufort and Norfolk. An examination by the War Department has been authorized with a view to creating a channel from Pamlico Sound up the Neuse River to New Bern, with a depth corresponding to the depth of the inland waterway, and from New Bern 20 miles up the Trent River to Quaker Bridge, with a depth of 10 feet. These improvements will be of incalculable

benefit to New Bern and the territory which it supplies.

From New Bern is distributed annually by wholesale houses a large volume of business in machinery, hardware, mill supplies, produce, boots and shoes, dry goods, hay and grain, stationery, office supplies, etc., to various points in the two Carolinas.

New Bern has shown progressiveness and activity in all forms of endeavor. One million dollars have been expended in improvements in a very short period, including the erection of three churches, one of which cost \$100,000; the Elks' Temple, a beautiful five-story office building; a large warehouse, a \$25,000 paper mill, one block of three brick stores at \$25,000 and another block of five stores at \$50,000, an auditorium to the school building at \$13,000, and a new jail costing \$23,000.

Two blocks, one of three and the other two stores, will be erected in the near future at a cost of \$30,000 and \$25,000, respectively.

Nearly 25 miles of concrete sidewalk, with granite curbing, have recently been laid, and contract has been let for paving streets in the business portion of the city with vitrified brick. These improvements will cost \$125,000. It is planned to establish in the Griffin Memorial School building departments of cooking and sewing for girls, and of manual training for boys. The system of public graded schools includes three commodious two-story brick buildings in the heart of the city, and \$7000 has just been spent for a modern two-story brick public school building for negroes.

Two steamers, four hose carriages and hook-and-ladder truck, all drawn by horses, in connection with an excellent system of water mains and the river water in the business and mill districts, give excellent protection from fire. Practically all of the lumber mills and industrial plants have their own fire-fighting equipment.

The city owns and operates the electric-light, water and sewerage systems, and the gas plant, which was recently acquired by Norfolk capitalists, is being greatly enlarged for improved service. Pure and wholesome drinking water is supplied from six deep artesian wells. In the city are three banks, one national and two State, each with a savings department, and two building and loan associations which have supplied more than 500 homes. These do not include a bank and two building and loan associations owned by negroes.

There is a modern and well-appointed hospital, and three modern hotels and a number of high-class boarding-houses look after commercial travelers and many Northern tourists who spend the winter here. A broad field is offered here for progressive capital. A vast outlying suburban property awaits only a good trolley-car system for development for residential purposes and for the transportation of products of the truck farm to the wharves and docks for shipment to the North. The tile industries of various kinds, woodworking plants to use material right at hand and canning factories to handle sea products and surplus vegetables have excellent opportunities here. Close by is cotton, 5000 bales having been sold on the New Bern market this season; there is no inexhaustible supply of all kinds of timber, and fertile fields capable of supplying food for thousands without outside aid. Desirable factory sites on railroads and rivers and excellent rail and water transportation facilities are among the endowments for New Bern's steady growth.

The Galveston Causeway.

Galveston county, Texas, and the railway companies interested in the proposed causeway across Galveston Bay to connect Galveston with the mainland have arranged to open bids for construction on

June 28. Proposals will be received for the entire causeway or any of the three sections—arch bridge, lift bridge and roadway. The causeway will be 10,642 feet long; arch bridge, 2472 feet long; road, 8170 feet long; lift bridge will have a clear span of 100 feet. The cost is estimated at \$1,400,000. Bids will be received at office of John M. Murch, county auditor, Galveston, and the plans and specifications will be on file at the office of the chief engineer of Gulf, Colorado & Santa Fe Railway, Galveston; bridge engineer of Galveston, Houston & San Antonio Railway, Houston; bridge engineer of Atchison, Topeka & Santa Fe Railway, Chicago; Stone & Webster, Boston, and Concrete-Steel Engineering Co., Park Row Building, New York. The last named will furnish copies of the plans and specifications.

FOR BIG IMPROVEMENTS.**A \$2,000,000 Expenditure Planned for Texas City.**

It is announced that the Texas City Company has arranged to expend \$2,000,000 for improvements at Texas City, the mainland suburb of Galveston, Texas. The company has issued bonds for \$2,000,000 and sold half of that amount for improvements to be in progress during the next 12 months, the other million to be expended during 1910. Capt. A. B. Wolvin of Duluth, Minn., is president of this company, whose improvements may be briefly outlined as follows: Building a duplicate south of present pier, constructing another and smaller pier north of present slip, building a large grain elevator, constructing 11 miles of additional trackage, general municipal improvements for townsite and constructing a system of warehouses which, in connection with the present warehouses, will give almost two miles of warehouse room.

The company has broken ground for extending its present pier to a length of 1200 feet, with a width of 500 feet. It will cover the outer end with a shed 500 feet wide and 600 feet long. Other plans call for the construction of seven warehouses; two of these to have a floor space of 46,500 square feet; three other warehouses nearby will comprise one with a floor space of 40,890 feet and two with a floor space of 43,500 feet each. These buildings are to be 100 feet wide, and have concrete foundations and floors, steel superstructure, asbestos siding and roof, sprinkler system for fire protection, electrically-operated moving platforms for conveying and other facilities for handling freight. Another warehouse will be of fireproof construction, with cattle chutes on one end and on the other a cooling station with a capacity of 10,000 tons. Later the company will build a grain elevator of steel and tile construction, containing circular tile storage tanks, for 500,000 bushels of grain; the elevator house will have a like capacity. A power station, stock yards, 11 miles of trackage, spur railways to industrial plants, a sewer system for the townsite, a water-works plant obtaining its supply from artesian wells, an electric plant for lighting, a three-story 60x100-foot office building, a \$30,000 hotel, etc., will be provided. Referring to these improvements, the Texas City Company telegraphs the MANUFACTURERS' RECORD as follows:

"Two million bond issue authorized and one million sold; proceeds will be used during ensuing year for constructing 500,000-bushel steel and tile elevator, two piers and four storage warehouses, each 100 feet wide by 1000 feet long, with concrete floors and foundations, steel superstructure, asbestos roof and siding, sprinkler equipment, 11 miles of additional yard tracks, etc. Construction is in charge of H. B. Moore."

RAILROADS

[A complete record of all new railroad building in the South will be found in the Construction Department.]

COAL LINE TO THE SEA.

South Atlantic Transcontinental to Beach Southport and Port Royal.

President S. A. Jones of the South Atlantic Transcontinental Railroad Co., Waynesville, N. C., writes the MANUFACTURERS' RECORD confirming the press report that contract has been let to McArthur Bros. of New York and Chicago for the line from the Tennessee coal fields to Greenville, S. C., and from Waynesville to Rutherfordton, N. C. They will begin survey the first part of May, and "when it is finished," says President Jones, "or such an amount of it is finished as is satisfactory, the contract is let to sound and reliable underwriters to furnish \$4,000,000 as needed by the construction company on the first two divisions of the road."

The line, according to President Jones' letter, will run from the coal fields' center via Knoxville and Sevierville, Tenn., and along the Pigeon River to Waynesville and Brevard, N. C.; to Greenville, S. C., and thence to Port Royal, S. C. The second division will be from Waynesville via Asheville to Rutherfordton, N. C., and thence to Southport, N. C., altogether about 1000 miles of line. He further says:

"The second two divisions from Greenville and from Rutherfordton to the sea are embodied in the same contracts, and involve the same underwriters and contractors, which contracts become perfect and binding after the work of county subscriptions has been completed from these two points to the sea."

"The road is being built under the absolute veto power (in the handling of its securities and finances) of the Governor and Council of the State of North Carolina. So there is no graft, no giving away of stock bonuses and giving away of bonds as bonuses, but a straight, legitimate underwriters' contract for a legitimate rate of interest and a legitimate commission for the services rendered, payable in cash."

"The road will be built largely by convict labor and county labor aid in these States. Therefore there will be filed, when the survey is complete, cash bonds by the construction company for the faithful performance of the work and by the underwriters contracts for the faithful delivery of the money, and the percentage of the securities that are reserved for the further protection of the State in securing the certain construction of the road. And no security is issued until a division of the road is complete and in operation acceptable to the Governor, the chairman of the Corporation Commission and the auditor of the State of North Carolina, who are the State directors."

"I have been elected the president of this road, and have been made the commissioner by the Governor of North Carolina and other States to secure action by the Legislatures of 22 States to obtain the necessary votes in Congress to give this road a deep-water terminal and a deep-water coaling station at Southport, N. C., and Port Royal, S. C. The road has no relation, directly or indirectly, with any railroad in existence. It could not merge with one, it could not lease or sell to one without the consent of the Governor and Council of the State. It is being built independent of all lines, with the right to make satisfactory traffic arrangements with all. Its rates will be based on actual cost of construction and equipment, and a fair earning above operating expenses and fixed charges as interest on the money invested."

MAY BE A TRUNK LINE.

Water Valley Southeastern Incorporated in Mississippi a Subject of Interest.

The incorporation of the Water Valley Southeastern Railroad Co. has been authorized in Mississippi to build a line from Water Valley to Eupora, about 60 miles. Connection will be made at Water Valley with the Illinois Central Railroad and at Eupora with the Southern Railway. It is rumored that this will be part of a trunk line projected from Mississippi River to the Gulf of Mexico. Chester H. Pond of Moorhead, Miss., is reported interested, although his name does not appear with those who are authorized to incorporate, who are J. D. Peacock, Walter C. Blount and J. R. Cahill of Water Valley. He was the promoter several years ago of a plan to build a line from Memphis to Pensacola. It was recently reported that he was promoting the Water Valley line to build to Calhoun City, Miss. Concerning this he writes the MANUFACTURERS' RECORD:

"The report is absolutely incorrect. I am in no way concerned in the effort to organize such a company. Certain parties there are trying to raise a fund with which to begin a short line, but it is at this time a matter of great uncertainty whether they will succeed or not. I have agreed to build the road if they get the money together, but I have nothing further to do about it. It will be decided within 10 days or two weeks, probably, and if the work is done I shall do it for them."

Galveston-Houston Interurban.

With reference to recent press reports that construction would soon be started on the electric railway long projected between Galveston and Houston, Texas, Mr. M. M. Phinney, district manager for Stone & Webster of Boston, writes the MANUFACTURERS' RECORD thus:

"The Galveston-Houston Electric Railway Co. has been organized under the laws of the State of Texas for the purpose of building an interurban railway between the cities of Galveston and Houston. The intermediate territory is flat farming and grazing country, and the interurban road will be primarily a through line, although it is expected that it will develop the section through which it passes, so that the local business will be an important factor.

"It is proposed to operate the interurban as a high-speed road over private right of way substantially the entire distance, 45 miles, until it reaches the city limits. The construction will be under the charge of the Stone & Webster Engineering Corporation of Boston."

New Equipment, Rails, Etc.

The International & Great Northern Railroad has ordered five freight locomotives from the Baldwin Works.

The International & Great Northern Railroad is reported in the market for 4000 tons of 80-pound rails.

The Red Springs Street Railway Co., Mt. Pleasant, Texas, is reported to have decided to buy two gasoline motor cars, each of 25 horse-power.

The Kansas City, Mexico & Orient Railway will, it is reported, purchase 20 locomotives.

The Southern Railway is reported to have let contract to the Pullman Company for 85 passenger cars. It has also ordered from the American Car & Foundry Co. six baggage express, six mail baggage, six passenger baggage and six postal cars, and from the Barney & Smith Car Co. two dining cars and three chair cars. Another report says that the American Car & Foundry Co. is building at Wilmington, Del., some steel passenger cars for the Southern.

The Washington (N. C.) Street Railway is reported to have ordered several semi-convertible cars from the Southern Car Co., High Point, N. C.

The Seaboard Air Line, it is reported, contemplates buying 1800 tons of bridge steel.

The Dallas (Texas) Street Railway will, it is reported, put in operation several pay-as-you-enter cars.

The Pennsylvania Railroad, it is reported, will build 15 dining cars of steel at its Altoona shops.

The Santa Fe system, it is reported, contemplates purchasing 1000 tons of rail.

The Cumberland Valley Railroad is reported in the market for 1200 tons of rails.

The Chesapeake & Ohio Railway is reported to have ordered 8100 tons of open-hearth steel rails from the United States Steel Corporation.

The Pennsylvania Railroad Co. has, it is reported, ordered 5400 tons of rails from the Carnegie Steel Co.

The Louisville Railway Co. of Louisville, Ky., has put in service 30 pay-as-you-enter cars.

Rumored M. K. & T. Deal.

According to a press report, which has not been confirmed, Edwin Hawley, who recently sold the Colorado & Southern lines to the Hill interests, has secured control of the Missouri, Kansas & Texas Railway, which it is said would also be of great value to Hill's system. The Missouri, Kansas & Texas Railway connects St. Louis, Hannibal and Kansas City, Mo., with San Antonio and Galveston, Texas, via Fort Worth, Dallas and Denison, Texas. There is a branch to Shreveport, La., another to Wichita Falls, Texas, still another to Oklahoma City, Okla., and one to Junction City, Kans. It has altogether about 3100 miles of line. A. H. Joline is chairman of the board and president. The directors include James N. Wallace of New York; Myron T. Herrick of Cleveland, Ohio; Charles G. Hedge of New York; A. W. Smithers of London, Eng.; Henry W. Poor of New York; H. J. de M. Oyens of Amsterdam, Holland; James Hagerman of St. Louis; J. Brown Potter of New York; B. P. McDonald of Fort Scott, Kans.; E. B. Stevens of Parsons, Kans.; A. J. Poor of Chapman, Kans., and others, including several officers of the road.

While it is intimated that Hill and Hawley contemplate establishing a new route to the Gulf by way of the Missouri, Kansas & Texas, it may be that if Hawley has acquired the road it will be used in connection with the Chicago & Alton and other Hawley properties, including the Chesapeake & Ohio, which he lately secured, all of which united would give a route from the Atlantic Ocean through the Middle West to Kansas City and the Gulf.

Appointments.

The Southern Railway Co. announces the following appointments: B. Z. Ruff, commercial agent, Spartanburg, S. C.; Alex. McBee, commercial agent, Greenville, S. C.; C. D. Brown, traveling freight agent, Abbeville, S. C.; J. B. Dunlap, freight solicitor, Birmingham, Ala.

C. P. Cooper having been promoted to the position of general agent at Memphis, Tenn., the office of manager of the St. Louis-Louisville lines is abolished.

The following appointments are announced as relating to operation and maintenance of the St. Louis-Louisville lines: C. L. Harris, general superintendent, St. Louis, Mo.; A. Stewart, general superintendent motive power and equipment; G. W. Taylor, general superintendent transportation; D. W. Lum, chief engineer maintenance of way and structures; W. H. Gatchell, superintendent of transfers;

W. M. Netherland, general storekeeper, all at Washington, D. C.

New Traction Line in Kentucky.

President W. T. S. Blackburn of the Cincinnati, Louisville, Lexington & Maysville Traction Co., Dry Ridge, Ky., writes the MANUFACTURERS' RECORD that the capital of this corporation, which was recently chartered, is \$1,000,000. The company proposes to build 250 miles of line, connecting Cincinnati, Louisville, Lexington and Maysville, all but Cincinnati being in Kentucky. The line will run through the bluegrass region, one of the richest agricultural sections in this country.

Concerning the prospect for the success of the enterprise, President Blackburn says: "Cincinnati has 19 steam railroads and traction lines north of the Ohio River, and only four steam railroads and no traction line running south. Within 100 miles radius of Cincinnati, running north, there are 1,200,000 population, and within the same radius south there are 1,040,000 people."

Gates May Build a Railroad.

According to a press report from Port Arthur, Texas, John W. Gates confirms a report that a railroad will be built from a point on the Kansas City Southern Railroad at or near Texarkana, Texas, westward to a connection with the Kansas City, Mexico & Orient Railway where that road crosses the Cimarron River in Oklahoma. The line will be about 300 miles long and will open much new country.

Another report said that a line would be built from Shreveport to Western Texas, and this Mr. Gates is reported as denying. A report from Oklahoma City, however, says that he and others have bought there a tract of land for \$29,000, which will be used for a railway terminal. In connection with this latter statement it is rumored that the Fort Smith & Western will build an extension into Oklahoma City.

Kansas City to St. Joseph.

Mr. S. P. Martin, secretary of the Interstate Railway Co., 735 New York Life Building, Kansas City, Mo., informs the MANUFACTURERS' RECORD that the company, incorporated in Missouri to build an electric interurban railway between Kansas City and St. Joseph, has secured from the property-owners about 80 per cent. of the right of way and has instituted injunction proceedings against other corporations and individuals to protect its route. It has also begun condemnation proceedings to secure rights of way not already contracted for. It is further stated that preparations are being made to begin construction of a standard-gauge electric railway on a grade of seven-tenths of 1 per cent., and with no curve sharper than 3 degrees.

Pine Bluff & Southwestern.

The Pine Bluff & Southwestern Railway Co. has been chartered in Arkansas to build a railroad from a point on the Missouri & North Arkansas Railroad five miles west of Georgetown, in White county, through Jefferson, Lonoke, Prairie and White counties, a distance of 65 miles. Capital, \$1,600,000. The incorporators are P. P. Byrd, S. C. Alexander, J. F. Rutherford, W. H. Westbrook, D. C. Bell, Fred Fox, Edgar Brewster and J. H. Walker of Pine Bluff.

The Hickory Railway.

Concerning the proposed Hickory Railway, to run from Hickory, N. C., to Catawba Springs, Newton, Brookford, Hildebrand and Cliffs, President M. E. Thornton of the Water Power Electric Co. at Hickory informs the MANUFACTURERS'

RECORD that the railway will not be ready for consideration until the electric company has been financed for construction and is quite ready for operation. The latter is now looking to floating its securities. The stock is \$500,000, of which \$240,000 is in the treasury, and the bonds will be \$650,000 of 6 per cents, interest payable semi-annually.

Wants Its Own City Lines.

Mr. Albert A. Small, 9 East 3d street, Tulsa, Okla., one of the incorporators of the Oklahoma Union Traction Co., writes the MANUFACTURERS' RECORD that nothing will be done in regard to this enterprise until a franchise has been voted in Tulsa, as it is desired to enter the city over the company's own lines.

Railroad Notes.

Official letters received by the MANUFACTURERS' RECORD from both companies deny the press report that the Atchison, Topeka & Santa Fe Railway line from Dallas to Paris, Texas, had been sold to the Frisco system.

The Nashville Interurban Railway, Nashville, Tenn., has begun regular operation of its line between Nashville and Franklin, Tenn., about 17 miles. Eleven cars will be operated each way daily.

An official letter from the Seaboard Air Line to the MANUFACTURERS' RECORD denies the press report that the company is preparing to build a branch from Wimauma, Fla., to Ruskin, Fla.

The Carolina, Clinchfield & Ohio Railway has, it is announced, begun the operation of trains between Johnson City, Tenn., and Wilmington, N. C., the latter point being reached over the Seaboard Air Line.

An officer of the Washington, Baltimore & Annapolis Electric Railway Co. informs the MANUFACTURERS' RECORD that the company is considering a proposed extension from Annapolis to Eastport, Md., and expects to put engineers on it this week to report on the cost and feasibility of the proposition.

A press dispatch from Brownsville, Texas, says that the Foundation Company of New York, contractor for the railway bridge which is to be built across the Rio Grande between Brownsville and Matamoras, is assembling forces preparatory to beginning construction. R. L. Downing is engineer in charge.

Wants Industries.

Mr. Q. A. Tipton of Loudon, Tenn., writes to the MANUFACTURERS' RECORD that his community is anxious for manufacturing plants, and will extend every encouragement to anybody contemplating the establishment of such industries. He says that he has recently sold to Messrs. John J. Lutz, John P. Staub and E. H. Saunders of Knoxville the plant of the Loudon Manufacturing Co., and that they, with Messrs. Fritz Staub and R. H. Sansom, both of Knoxville, have incorporated the John J. Lutz Manufacturing Co., with a capital of \$20,000, and will shortly start up the plant manufacturing wooden mantels and tables. He adds:

"We have here the Loudon Hosiery Mills, employing about 100 hands; the Newport Mill Co., running a flour and meal mill day and night with a full force of men; the A. W. Ward lumber mill, and the new plant of John J. Lutz Manufacturing Co., which will employ 75 to 100 men. We have a population of about 1200 and a fine class of people, the town being the county-seat of Loudon county, one of the richest and best in the State, located on the Tennessee River and the Southern Railway, 28 miles west of Knoxville and 82 miles east of Chattanooga, Tenn."

TEXTILES

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the MANUFACTURERS' RECORD. We shall be glad to have such matters at all times, and also to have any general discussion relating to cotton matters.

Southern Cotton Manufacturers.

It having been found that the large number of papers presented at previous conventions has interfered with general discussion by the members, the program for the thirteenth annual convention, to be held at Richmond, Va., May 25-26, of the American Cotton Manufacturers' Association presents but few set papers. Mayor D. C. Richardson of Richmond will welcome the convention, and response will be made by Col. L. D. Tyson of Knoxville. The papers will include annual address by President T. H. Rennie; "Developments of Foreign Cotton Goods Trade," by R. L. McKellar, assistant freight traffic manager of the Southern Railway; "Cotton Waste Manufacture," by W. A. G. Clark, special agent of the Department of Commerce and Labor; "Baling and Handling Cotton," by A. W. Smith, president Union Buffalo Mills Co.; "The Tariff on Cotton Textiles," by D. A. Tompkins of Charlotte, N. C.; report of the committee on cotton exchanges, by E. A. Smyth of Greenville, S. C.; report on the International Cotton Congress, by D. Y. Cooper of Henderson, N. C.; report of the committee on uniform sales contract, by L. W. Parker of Greenville, S. C., and report of the committee on by-laws, by Charles H. Horton of Aragon, Ga.

Among the entertainments to be tendered the visitors are a smoker at the Jefferson and an excursion down the James to Jamestown Island.

The officers of the association, which grew out of the Southern Cotton Spinners' Association are Messrs. T. H. Rennie of Pell City, Ala., president; L. W. Parker of Greenville, S. C., vice-president; C. B. Bryant, Charlotte, N. C., secretary and treasurer, and T. Ashby Blythe, Philadelphia, chairman; August W. Smith, Spartanburg, S. C.; F. A. Flather, Boston, Mass.; J. J. White, Jr., McComb City, Miss.; Charles H. Gorton, Aragon, Ga.; Leonard Paulson, New York; D. Y. Cooper, Henderson, N. C.; Charles K. Oliver, Baltimore, Md.; Charles H. Fish, Dover, N. H.; W. T. Lang, Knoxville, Tenn.; E. A. Smyth, Greenville, S. C.; M. M. McColl, Opelika, Ala.; E. Chappell, Atlanta, Ga.; Charles B. Amory, Boston, Mass.; John C. Rankin, Lowell, N. C., board of governors.

Completing the St. Pauls Mill.

The MANUFACTURERS' RECORD is informed that the St. Pauls (N. C.) Cotton Mill Co. will soon complete its plant, and expects to begin manufacturing by June 1. This company has erected a 100x250-foot building, and is installing 5000 spindles, etc., costing \$60,000, for manufacturing yarns. The Mason Machine Works, Taunton, Mass., and the Lowell Machine Shops, Lowell, Mass., are furnishing the machinery, while R. C. Bibberstein, Charlotte, N. C., is the architect in charge. L. Shaw is president; J. M. Butler, vice-president, and A. R. McEachern is secretary-treasurer of the St. Pauls company.

New England Mill Men.

Officers elected at the annual meeting in Boston of the National Association of Cotton Manufacturers are: President,

Charles T. Plunkett, secretary Berkshire Cotton Manufacturing Co., Adams, Mass.; vice-presidents, George Otis Draper, Rhode Island Coal Co., Providence, R. I.; Franklin W. Hobbs, treasurer Arlington Mills, Lawrence, Mass.; directors, George P. Grant, Jr., vice-president and general manager Fitchburg (Mass.) Yarn Co.; Edwin Farnham Greene, treasurer Pacific Mills, Lawrence, Mass., and David S. Johnston, general superintendent Harmony Mills, Cohoes, N. Y.

Completing the Transylvania Mill.

The Transylvania Cotton Mill Co., Brevard, N. C., has completed the construction of its mill building, a brick structure 75x150 feet in size. It is now installing an equipment of machinery, which will comprise 4000 spindles, etc., driven by electricity, for manufacturing yarns. This power will be obtained from the Cascade Power Co., which has about completed its water-power-electrical plant at Hamilton Shoals, on Little River, six miles from Brevard. This company will have at first a capacity of 1000 horse-power.

The New Erwin Mill.

The Erwin Cotton Mills, Durham, N. C., awarded contract to the Fiske-Carter Construction Co., Worcester, Mass., for the construction of buildings for the additional Erwin mill, as reported last week. These structures will cost about \$200,000. They will be of brick construction, one story high, comprising the following departments: Spinning-room, 518x200 feet; weave shed, 307x303 feet; picker-house, 87x32 feet. The textile machinery will include 50,000 spindles and 1500 looms.

The Montala Manufacturing Co.

The Montala Manufacturing Co. of Montgomery, Ala., has been incorporated with a capital stock of \$250,000 and the following officers: President and treasurer, Thomas Barrett, Jr., Augusta, Ga.; vice-president, F. H. Barrett, Augusta; secretary, M. L. Greil, Montgomery. This company acquires the People's Cotton Factory, which has 10,000 ring spindles, 160 broad looms, 160 narrow looms, etc., for manufacturing sheetings and shirtings.

The Marion Manufacturing Co.

The Marion (N. C.) Manufacturing Co. has awarded contract to Ebaugh & Ebaugh of Greenville, S. C., for the construction of mill buildings to cost about \$70,000. These buildings will be equipped with 12,500 ring spindles, 300 looms, etc., for manufacturing brown sheetings. The company's organization and plans were reported recently. It is capitalized at \$250,000, and D. D. Little of Spartanburg, S. C., will be president.

A 200-Loom Addition.

The Belle-Vue Manufacturing Co., Hillsboro, N. C., has awarded contract to J. D. McAdams, Elon, N. C., for the erection of an additional building. This structure will be one story high, 73x100 feet, and will be equipped with 200 looms for manufacturing fancy ginghams. Contract for the machinery has been awarded to the Crompton & Knowles Loom Works, Worcester, Mass.

Flannel, Husking Cloth, Etc.

T. Gatchet, 631 Commercial place, New Orleans, La., wants canton flannel, husking cloth, etc., for the manufacture of gloves.

Central City Hosiery Mfg. Co.

Central City Hosiery Manufacturing Co. of Macon, Ga., has been incorporated with a capital stock of \$10,000, and privilege of increasing to \$100,000, by D. L. Thomas, G. R. Rankin, H. J. Moody and

J. T. Hall. This company will install machinery for a daily output of 300 dozen pairs of knit hosiery.

Artificial Silk and Horsehair.

The Merrimac Mercantile & Manufacturing Co., Merrimac, Texas, will establish a plant for the manufacture of artificial silk and horsehair. It invites correspondence from consumers of the products named, and will furnish samples to inquirers.

Proposed Electric-Driven Mill.

The Green River Power Co., W. A. Mauney, president, Kings Mountain, N. C., will build a cotton mill to be operated by electricity transmitted from the water-power-electric plant the company plans to build near Hendersonville, N. C. It has not decided details for either plant.

Will Establish Hosiery Mill.

A company has been organized to build a knitting mill at Forest City, N. C. It will install 10 hosiery machines and a gasoline engine. G. P. Reid is president; Cyrus Wilkie, secretary, and W. W. Hicks, treasurer.

Increasing Company's Capital.

The Globe Manufacturing Co., Gaffney, S. C., will increase capital stock from \$75,000 to \$200,000 and build an addition. It now operates 4000 ring spindles, producing chain warps and skeins for weaving.

Knitting Machines and Yarns.

Ole Kravik, Jr., Marietta, Minn., advises the MANUFACTURERS' RECORD that he wants quotations on knitting machines and yarns, as he contemplates installing a knitting mill.

The Penrose Manufacturing Co.

The Penrose Manufacturing Co. of Penrose, N. C., has been incorporated with a capital stock of \$125,000 by H. P. Moore, John H. Cox and others to manufacture cotton yarns.

Textile Notes.

The recent report that the Anniston (Ala.) Cordage Co. will double its plant was not correct.

It is reported that W. A. Ellington of Chapel Hill, N. C., will establish a knitting mill at Sanford, N. C.

The Mary-Leila Cotton Mill of Greensboro, Ga., contemplates increasing the capacity of its plant, now operating 6120 ring spindles, 180 broad looms, etc., on sheeting.

The Chickasha (Okla.) Commercial Club is considering a proposition from L. M. Potts for the establishment of a knitting mill. It is reported that an investment of \$150,000 is contemplated.

It is rumored the Huntsville (Ala.) Knitting Co. will double the capacity of its plant, now operating 6200 spindles, 38 knitting machines, etc., on the production of underwear.

Advantages of Charleston.

A special illustrated edition of Charleston, W. Va., has recently been published and circulated by the *Evening Mail* of that city. With a population of more than 25,000, Charleston is an important commercial city, is the center of one of the richest coal fields of West Virginia, and is provided with many natural advantages for the making of a great manufacturing center. Prospectors are invited to investigate the opportunities which the city presents.

At least 40 men will be in the party from Atlanta that will attend the annual meeting at Memphis May 18-20 of the Interstate Cottonseed Crushers' Association.

LUMBER

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

Distilling Turpentine by Electricity.

The attention of Consul-General George N. West has been called to a small plant in operation in Vancouver, in which experiments have been carried on for several years with the view to obtaining turpentine from the resinous woods of British Columbia by an electrical process of distillation. He reviews the progress made.

The operations thus far have been carried on in a small way, only about two cords of wood or mill refuse having been treated daily. It is claimed, however, that the results have been eminently satisfactory. The turpentine, after tests by chemists and painters, who have used the product both for inside and outside work, pronounce it to be equal, if not superior, to the turpentine distilled from the long-leaf pine of the South. From one cord of the resinous wood treated it is claimed that the tar, oil, rosin, pitch and charcoal (the by-products) more than pay the cost of the distillation of the turpentine, thereby making this process a valuable one.

It is claimed that from one cord of pitchy wood costing \$5 there can be extracted chemically pure turpentine, tar oil, rosin, charcoal and pitch to the aggregate value of \$24.70, the present market value of these commodities, at an expense of \$12, giving returns of \$12.70 per cord. That this statement is not erroneous is vouched for by persons who have the most thorough knowledge of the process and cost of manufacture, they claiming that the small plant now in operation is producing the products at the price per cord stated.

The amounts of by-products said to be obtained from one cord of wood (amount of turpentine secured not being stated) are as follows: Rosin, 60 pounds; tar oil, 20 gallons; charcoal, 1300 pounds. The oil is used for wood preservative, and is also manufactured into shingle stain. The charcoal, having been coked and cooled in a can out of contact with the air, is very perfect and valuable for making powder.

The resinous woods necessary for use in this plant are accessible in large quantities at cheap rates, not only from the many mills in Vancouver and near vicinity, but also from the standing timber that is not suitable for lumber, and can readily be procured. The plant has recently been increased to treat 40 cords of wood per day.

Building Activity in April.

Statistics from Southern and Southwestern cities indicate that building operations were active in these sections during April, and in some localities large increases are noted as compared with previous months. In Birmingham permits were issued to a value of more than \$220,000 for April, as against \$130,606 for the corresponding month last year. For the first four months of the year operations represent a valuation of \$776,777, an increase over the same period last year of \$362,711. Permits were issued in Savannah to the number of 31, including 15 dwellings, two amusement houses, apartment-house, garage and miscellaneous structures. In Augusta and vicinity building operations are particularly active, it being estimated that construction work now in progress will amount to \$250,000. A total of 86 permits was issued in Jacksonville during the month, representing a value of \$203,000, an increase over March of nearly \$45,000. Operations in Memphis for the month include 65 frame structures, 52 additions, 10 brick buildings, 11 veneered, 1 hollow-rock building and 79 alter-

ations and repairs. The value is estimated at \$316,223, a slight increase over April of last year. Permits were issued in Dallas to the number of 163, representing a valuation of \$349,037, an increase over April, 1908, of 52 in the number of permits and \$82,909 in value. For the first four months of the year 600 permits were issued, having a valuation of \$1,218,847, which is an increase over the corresponding period last year of 171 in the number of permits and \$616,830 in value. In Fort Worth a total of 100 permits was issued, representing a valuation of \$725,471. The value of operations in Kansas City for April is estimated at \$1,553,900, and in Oklahoma City at \$393,300.

Building in 1908.

The total cost of the buildings erected in the principal cities of the United States in 1908 was \$546,467,390, according to Jefferson Middleton of the United States Geological Survey, who has collected statistics on this subject in connection with his investigations of the clayworking industries. In 1907 the cost of buildings in these same cities reached a total of \$626,148,890. The decrease in cost in 1908 therefore amounts to \$79,681,500, or 12.73 per cent. The following table shows the number of permits issued and the cost of buildings erected in each of the cities:

Building Operations in the Leading Cities of the United States in 1908.

| | Number of permits issued. | Cost of buildings. |
|---------------------|---------------------------|--------------------|
| Allegheny, Pa. | 4,153 | \$4,833,941 |
| Atlanta, Ga. | 2,893 | 7,554,709 |
| Baltimore, Md. | 2,632 | 11,253,712 |
| Boston, Mass. | 10,769 | 45,865,240 |
| Brooklyn, N. Y. | 2,788 | 6,847,000 |
| Buffalo, N. Y. | 425 | 2,153,070 |
| Chicago, Ill. | 10,627 | 67,234,800 |
| Cambridge, Mass. | 3,553 | 6,428,888 |
| Cincinnati, Ohio. | 6,674 | 9,896,869 |
| Cleveland, Ohio. | 1,698 | 3,400,273 |
| Columbus, Ohio. | 1,193 | 3,234,280 |
| Dayton, Ohio. | 3,117 | 10,098,020 |
| Denver, Col. | 3,662 | 10,682,170 |
| Detroit, Mich. | 339 | 1,140,927 |
| Fall River, Mass. | 1,064 | 2,181,759 |
| Grand Rapids, Mich. | 676 | 3,107,348 |
| Hartford, Conn. | 4,013 | 5,895,928 |
| Indianapolis, Ind. | 1,367 | 4,490,466 |
| Jersey City, N. J. | 792 | 1,108,472 |
| Kansas City, Kans. | 3,840 | 10,562,041 |
| Las Vegas, Nev. | 7,371 | 9,931,377 |
| Louisville, Ky. | 2,909 | 2,914,141 |
| Lowell, Mass. | 497 | 1,019,081 |
| Memphis, Tenn. | 2,519 | 3,300,508 |
| Milwaukee, Wis. | 4,169 | 10,665,669 |
| Minneapolis, Minn. | 5,638 | 10,693,915 |
| Nashville, Tenn. | 4,215 | 1,968,505 |
| Newark, N. J. | 2,419 | 7,161,668 |
| New Haven, Conn. | 919 | 2,091,465 |
| New Orleans, La. | 2,457 | 5,744,311 |
| New York, N. Y. | 6,103 | 117,819,382 |
| Omaha, Neb. | 1,526 | 4,590,650 |
| Philadelphia, Pa. | 13,363 | 28,152,265 |
| Pittsburgh, Pa. | 4,623 | *13,136,387 |
| Providence, R. I. | 1,386 | 4,034,000 |
| Reading, Pa. | 571 | 497,700 |
| Richmond, Va. | 1,330 | 3,169,431 |
| Rochester, N. Y. | 1,302 | 4,975,317 |
| St. Joseph, Mo. | 678 | 1,717,723 |
| St. Louis, Mo. | 9,119 | 21,190,369 |
| St. Paul, Minn. | 7,625 | 7,625,538 |
| San Francisco, Cal. | 6,729 | 31,668,341 |
| Scranton, Pa. | 892 | 2,366,405 |
| Seattle, Wash. | 7,901 | 13,777,329 |
| Syracuse, N. Y. | 1,291 | 3,317,195 |
| Toledo, Ohio. | 1,065 | 2,081,448 |
| Washington, D. C. | 5,258 | 10,800,096 |
| Worcester, Mass. | 1,102 | 2,286,261 |
| Total. | 163,087 | \$546,467,390 |

*Allegheny included in Pittsburgh, Pa.

Tennessee Timber Land Deal.

With reference to its reported purchase of 1300 acres of timber land near Sycamore, Tenn., the Althauser-Webster Weaver Lumber Co. of Nashville telegraphs the MANUFACTURERS' RECORD that it has bought a tract estimated to cut 10,000,000 feet of yellow-pine poplar and oak. At a cost of \$8000 the company will erect a sawmill of 25,000 feet daily capacity, which it expects to be ready for operation by June 1. Messrs. D. Weaver, William Althauser and Charles Webster are reported as interested in the enterprise, and the purchase price of the property is stated at \$65,500.

A dispatch from Grand Cane, La., states that J. A. Isgate of that city recently shipped seven carloads of crossties, for which sweet gum and other woods were used extensively in addition to pine and oak.

MANUFACTURERS' RECORD.

MINING

Clays in Florida.

The valuable deposits of clay that are found so widely distributed in Northern and Central Florida have to the present time received little use except in the manufacture of common building brick. They are, however, well suited to a variety of purposes, and some front and fire-brick, red earthenware, tile and pottery have been produced.

The brickmaking industry of the State is most active near the large centers of population, where the demand for the product is good. About 27 factories are in operation in 13 counties. The factories are most numerous near the northern line of the State, because the clays are there most abundant.

In addition to the supply necessary to meet the home demand, considerable clay is mined in Florida and shipped to some of the Northern States, where it is sold under the name of ball clay and used for the manufacture of pottery. A plant for the manufacture of pottery from this clay, which is mined in Putnam and Lake counties, has recently been established at Jacksonville.

Practically all the clays which are now used for brick and tile manufacture in Florida burn to a bright-red or yellow color at comparatively low temperatures. However, the products of some of the kilns show every gradation in color from light buff to nearly black, the variations being usually due to imperfect oxidation of the iron compounds present, the lighter colors resulting from burning at too low a temperature and the darker from lack of sufficient air to furnish oxygen. When clays containing both lime and iron are properly burned a buff color may result.

Some brief notes on the geology of the Florida clays, by George C. Matson of the United States Geological Survey, have just been published by the survey in an advance chapter from Bulletin 380 (380-K), which forms Part I of "Contributions to Economic Geology, 1908." This chapter, which contains also lists of the survey publications relating to clays, fuller's earth, lime and magnesite, gypsum and plasters, glass sand, abrasives, mineral paint and phosphates, will be sent free of charge to anyone making application to the director United States Geological Survey, Washington, D. C.

To Develop Red-Ore Property.

The Pigeon Mountain Iron Co. has purchased a 3700-acre tract of red iron-ore land located near Lafayette, Ga. It is reported the price was \$120,000, and that the land is estimated to contain 75,000,000 tons of ore. The company will develop the property, and may possibly build an iron furnace in the future. It was organized recently with a capital stock of \$500,000 and the following officers: President, Joseph C. Hass, Montgomery, Ala.; vice-president, R. W. Watson, Atlanta, Ga.; secretary-treasurer, Edwin Hass, also of Atlanta.

Clifty Consolidated Coal Co.

The MANUFACTURERS' RECORD is informed that the Clifty (Tenn.) Consolidated Coal Co., Dr. William B. Young, general manager, has completed its organization to take over the properties of the Clifty Creek Coal & Coke Co., mining 700 tons of coal per day, and the Caney Fork Gulf Coal Co. The new company has issued \$440,000 of 5 per cent. gold bonds, and expects to increase its production to 1500 tons per day. Its coal lands comprise an area of 12,000 acres in White, Cumberland and Van Buren counties, Tennessee, containing a four-foot vein of

Seawee coal. Mr. E. M. Young, 1125 James Building, Chattanooga, is the consulting engineer for the company.

Consolidate Granite Operations.

For the purpose of consolidating operations of the Balfour Pink Granite Co. of Asheville, N. C., the Rowan Granite Co. and the American Stone Co., according to a dispatch from Salisbury, N. C., the W. A. Esson Granite Co. has incorporated with a capital stock of \$1,250,000. The main office of the company, it is said, will be at Salisbury, and quarries will be developed about three miles from the city. It is stated that branch offices will be established in New York, Philadelphia, Toronto and other cities.

Southern Mica Development.

Information regarding the establishment of a new Southern enterprise in which Northern capitalists are interested is contained in reports from Franklin, N. C. These reports announce that Messrs. A. L. Roberts of Watertown, N. Y.; Colonel Holbrooks and J. B. Fairburn of Syracuse and others have organized a company, capitalized at \$100,000, to manufacture mica board, mica washers, spark plugs, etc. The factory, it is stated, will be erected at Franklin, and will employ between 40 and 50 people.

Developing Georgia Iron Mines.

The Pittsburgh-Bartow Mining & Manufacturing Co. has been incorporated with a capital stock of \$125,000 to develop iron-ore property in Bartow county, Georgia. It has completed a railway siding, installed mining and loading machinery, and will begin shipping a large tonnage of iron ore. This company's officers include George M. Koehne of Bridgeport, Ohio, president, and Walter Kennedy, Pittsburgh, Pa., consulting engineer.

Cement in 1908.

The United States produced in 1908, according to returns to the United States Geological Survey, 52,775,925 barrels of cement, valued at \$44,376,656, an increase over 1907 production of 545,583 barrels, but a decrease in value of nearly \$11,600,000. Of the 1908 output, 51,002,612 barrels, valued at \$43,472,679, were Portland cement.

Mining Notes.

Shipments of coal from the piers of the Chesapeake & Ohio Railway at Newport News for April amounted to 271,000 tons.

Of \$6,316,817 worth of slate produced in this country in 1908, Virginia produced \$194,356 worth, Maryland produced \$102,186 worth and Arkansas \$2500.

The Tidewater Coal & Coke Co. of Boston is reported to have received orders for the entire production of its coal mines at Vivian and Kimball, W. Va., during the coming year. The Zenith Coal & Coke Co. of Bluefield, W. Va., is also said to have received orders sufficient to keep its mine at Crumpler operating to its full capacity for a year.

The Philadelphia & Gulf Steamship Co., according to a report from Philadelphia, has announced through President F. S. Groves the purchase of the steamship Mae from A. H. Bull & Co. of New York. It is said that the service between Philadelphia and New Orleans is to begin July 1. The steamer, which was built 10 years ago, is 250 feet long, 42 feet beam, and draws 24 feet of water loaded. She is of 2201 tons register, but it is said that her cargo capacity is 3500 tons.

Subscribe to MANUFACTURERS' RECORD.
\$4 a year, or six months for \$2.

MECHANICAL

Modern Press-Brick Machinery.

For several thousands years bricks have been in demand, and many brick plants are today operating to their complete capacity. When about to establish a plant the first thing to be considered is the quality and supply of material from which to

from six to seven feet. An advantage of the dry-press method is that by gathering clay each day during the summer and storing it bricks can be produced all the year round. The Mt. Vernon plant uses three clay gatherers, and secures from 80 to 100 loads of clay per day from each.

From the storage shed the clay, generally speaking, is fed to a pulverizer or

the machine may be used continuously without foundation bolts.

The pressure arms act directly on the clay in the molds, so that the force of the entire machine is exerted on each brick. This means that the clay is evenly and smoothly pressed into every part of the mold, and that the particles of clay are so thoroughly squeezed together that the clay becomes one compact mass, solid from center to outside, with clean, continuous edges and sharp corners. So firm are the molded brick that they may be handled freely. An accompanying illustration shows them being loaded by hand from the press to the truck. Another view is of the completed process, where the brick

the Third National Bank Building, St. Louis, Mo.

Arnott Steam Pile Hammer.

An accompanying illustration represents the Arnott steam pile hammer manufactured by the Union Iron Works of Hoboken, N. J. The company presents the following description: "The superiority of the steam pile hammer over the older simple drop hammer or monkey is generally recognized.

"Though giving a lighter blow, the steam hammer follows up its blows so rapidly that the pile and the ground do not have time to settle back into their normal static condition before the next blow. This well-



BRICK PLANT AND CLAY FIELDS.

make the bricks and the method of manufacture.

An acceptable way is the dry-press process. Brick thus made are of high grade, with polished faces, perfect edges and sharp corners. There have been yards, started originally for producing brick by one of the other methods, that have changed to the dry-press way. A recent case is the Industrial Brick Co., Mt. Vernon, Ind., of which J. A. Behrick is president and manager. The plant was

dry pan. One or the other of these machines is used, depending on the character of the clay. In either case the clay is reduced to powder and then conveyed to a mixing machine that stirs the powder thoroughly and prevents any segregation of fine or coarse particles. In the plant in reference the pulverizer is used.

From the mixer the clay is fed by gravity into the hopper of the press, from which it is automatically delivered to the molds of the press. The press used is the



A MODERN BRICK KILN.

begun January, 1895, as a soft-mud plant, the first brick being turned out in April of that year. After 10 years Mr. Behrick found a greater demand for the dry-press brick, and the necessary machinery was installed to convert the plant.

The process of producing dry-press brick is relatively simple. Roughly speaking, clay is gathered, ground, molded, pressed and burned, and the result is brick.

In the plant referred to above the clay area is 22 acres, running to a depth of

Andrus machine, manufactured by the Scott Manufacturing Co., St. Louis, Mo. It is illustrated herewith. This press is 10 feet 7 inches high, of the four-mold type, which means that four brick are made at a time, the daily output being 20,000 bricks. The press is a strong, powerful machine; its actual weight is 15 tons; yet so well has the weight been apportioned to the working parts that the machine requires but six horse-power to operate, and so well balanced is it that

now finished and ready for the market are taken from the kiln.

The process described is duplicated with either shale or fire-clay, and in either case the material is used in its natural state, without adding any water, as in the old processes, and without the use of expensive drying apparatus it is taken direct from the press to the kiln.

The Scott Manufacturing Co. also makes hand presses for ornamental and special bricks, and all the machinery and supplies that enter into dry-press work. For 18 years the company's machinery has been on the market. Wm. F. Scott, the company's president, has been actively identified with the brick-press industry for 10 years. The company's factory is at Keokuk, Iowa, and its offices are in

known fact is the root of the reason for the superior effectiveness of the steam hammer, while the fact that the lighter blow does not split or broom the pile head gives it an additional advantage.

The Arnott pile hammer has been designed to place in the hands of engineers and contractors a simple, convenient and at the same time powerful means of driving piles.

"This hammer is simple, compact and proof against damage from rough handling.

"The principle of operation is the alternate rapidly raising and driving down of a ram of considerable weight by steam or compressed air.

"Referring to the sectional views, a plain cast-iron body of desired weight is formed with a cylinder and valve chest in



A SCOTT MANUFACTURING CO. BRICK PRESS.

its upper portion, enclosing the ram and valve rod below, and is formed at the bottom with jaws to fit over the top of the pile.

"The operation of the hammer is as follows:

"On opening the inlet valve or throttle, steam (or compressed air) is admitted to the lower end of the cylinder, raising the ram to the top of its stroke; the valve is actuated by a rod attached to the ram, and steam is turned into the upper end of the cylinder and the lower end opened to exhaust, the free fall of the ram being



ARNOTT STEAM PILE HAMMER.

thus accelerated by the steam or air pressure on the back of the piston and the effect of the blow correspondingly increased. On the down stroke, when the ram strikes the pile, the valve is reversed by the rod, and the ram raised as before, and so on in rapid succession. A loose pile plate between the ram and the head of the pile distributes the blow over the pile, and by means of a pointed pin, which penetrates the top of the pile, prevents side movement of the hammer due to vibration. The whole construction of the hammer is solid and simple and self-contained throughout.

"The frame or body is one single casting, and forms the cylinder valve chest and guides, and encloses the ram and valve mechanism, thus protecting them from injury; the safety buffers and pile plate are also within the frame, so that nothing but the inlet valve or throttle is exposed. In view of the rough usage to which contractors' machinery is liable, the advantage of this will be evident. The piston and rod are in one solid steel forging, and the ram head is of solid steel and secured to the rod by a strong cotter; the piston, piston rod and ram head together form the 'ram,' the ram head moving in guides machined in the solid frame. Since weight is one chief requirement, all parts are naturally heavy and of more than ample strength.

"The valve is a simple mechanically-operated rotative valve within a bushing, in which the parts are accurately finished to gauge, thus ensuring correct admission and cut-off.

"Attention is invited to the economy of steam or air in this hammer. The movement of the valve is so designed that effective operation is attained with the greatest economy of steam or air.

"The valve is actuated by a spindle with a squared shank carrying a double rocking lever, whose motion is given by two trips on the upper end of the valve rod. The rocking lever and trips are made of the best grade of tool steel for the purpose.

"The valve rod is a straight piece of stout steel securely fastened at its lower end to the ram head, and moves in machined guides located near the lever where its work is done.

"The pile plate is made of steel, and of

ample thickness for the rough usage it gets.

"The travel of the ram while in operation is controlled at the bottom of the stroke by striking the pile (through the pile plate), and at the top by the movement of the valve.

"The piston is also prevented from striking the cylinder heads by safety buffers which limit the overtravel of the ram, but are not struck during the operation of the hammer on the pile.

"The hammer is made in six sizes, three for large isolated round or square piles, and three for sheet piling. The sizes are graded from No. 1, the largest, with a total weight of 6500 pounds, to No. 6, the smallest, with total weight of 750 pounds.

"All sizes are built on the same general design as described, except that the three largest sizes, No. 1, No. 2 and No. 3, have an extra removable base adapted for round piles.

"Particulars of each size are given in the table.

"Three small sizes, No. 4, No. 5 and No. 6, for sheet piling, do not require guides or ways, and are conveniently handled with a small chain block suspended from a temporary overhead beam.

"The small dimensions of these sizes admit of their use in places where head room is limited.

"No. 4 is intended for use where much six-inch sheeting is to be driven.

"No. 5 is for four-inch sheeting, and carries removable jawplates to allow of its being used for six-inch sheeting if desired.

"No. 6 is designed to take either three-inch or two-inch sheeting, and is provided with a set of removable jawplates adapting the jaw opening to each of these thicknesses.

"The principal claims advanced for this hammer are:

1. Great power as compared with weight and size.

Vt. This company is well known as the maker of the Anderson patent rope-driven traveling crane. It claims its electric crane is more economical in the use of electricity than other types, and describes the new machine as follows: "In the Lane electric cranes the motors run in one direction only. In all others the heavy motor armatures (often at speeds above 1000 R. P. M.) must be stopped, reversed and brought up to speed again for each and every change of motion in the hook, trolley or bridge. In the Lane cranes all this current is saved. The motors are non-reversing and connected by rawhide spur gearing to beveled paper and iron friction wheels, by means of which the reverse motions are effected and controlled.

"This does away with the third motor, one motor on the bridge and another on the trolley being all that is required. The latter operates both trolley travel and hoisting mechanism, but owing to the peculiar combination of frictions, both these motions are as independent as if a separate motor were provided for each.

"The motors used are the General Electric Co. (Schenectady, N. Y.) machines, of a special enclosed type which it dust-proof. In shops where stone is cut this is an important feature, as the dust soon penetrates into the bearings of unprotected motors. Owing to the fact that the heavy armatures run constantly in one direction, they act as flywheels of considerable power and capacity to equalize and compensate the fluctuating demands for current, especially when loads are applied suddenly.

"The electrical connections are planned with special reference to reliability, safety and convenience, and ample grounding takes care of any possible leakage that might otherwise give the hook-man an occasional unpleasant twinge.

"The starting-box switches of both mo-

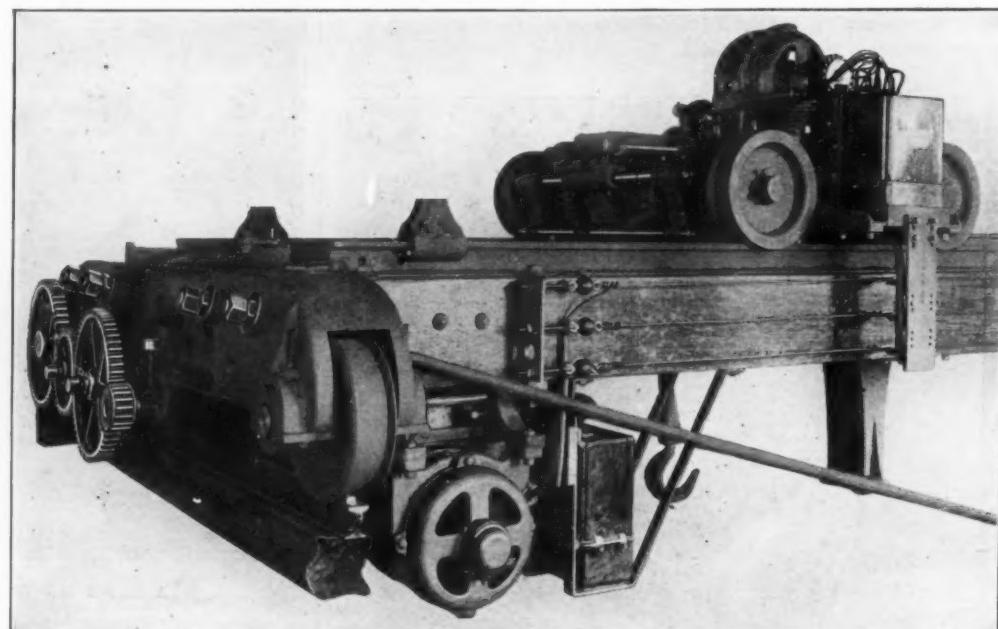
ting filled with heavy grease and flake graphite, and these are fitted with stuffing-boxes to prevent grease working out in extreme hot weather. In all other ways also the utmost care has been taken to prevent any dripping of oil or grease from the crane onto the work that might be beneath, a feature which will be appreciated.

"Ample provision is made for taking up wear at all important points, as well as for keeping the paper and iron friction wheel in proper contact and alignment. The paper or fiber shells can be easily replaced when worn out, and the paper wheel is in all cases the driving member of the pair in these cranes. This does away with all tendency of the paper to wear into ridges or out of round, which often happens where the opposite plan is followed.

"Owing to the use of worm gearing in the hoisting mechanism, brakes are hardly needed on this crane. The are provided, however, but are seldom used except to prevent 'racing' of the worm in lowering a heavy load.

"So far these cranes have been made only with the bridges of Southern pine trussed with wrought-iron rods, but we expect to be able to offer them at an early date with steel bridges when such are required. For spans not exceeding 50 feet the timber bridge is perfectly satisfactory, and can be sold at a much lower price than the steel bridge.

"With the exception of the hoisting rope and hook, these cranes are designed to have a factor of safety of fives in all parts. The reasons for making the exceptions named are to protect the more expensive portions of the machine from serious overloading, as well as to insure that such overloading would be indicated by a gradual failure of the rope or hook rather than in a sudden yielding of some more rigid member.



IMPROVED ELECTRIC TRAVELING CRANE.

2. Simplicity of construction.
3. Solidity, compactness and convenience of form.
4. Great strength of various parts.
5. Economy in operation.
6. Economy in handling.
7. Economy in repair parts."

Improved Electric Traveling Crane.

Contractors, operators of industrial plants and others interested in electric cranes are invited to note the accompanying illustration of the improved type of electric traveling crane manufactured by the Lane Manufacturing Co., Montpelier,

tors are controlled from operator's seat, at one end of trolley. From this position the driver has always an unobstructed view of his work, and is able to tell exactly what he is doing without depending on signals from those standing on the ground.

"The little trolley wheels which pick up the current are provided with metaline bushings which never need oiling, and every important bearing in the machine is provided with grease cups in addition to the usual oiling arrangements. Both trolley and hoisting trains are driven through worm gearing running in an enclosed cas-

"These cranes are fully guaranteed. They have on several occasions lifted and carried loads of more than two and one-half times their rated capacity. This was done without injury or apparent effort, though we do not advise such practice."

Perry Pneumatic Water System.

There is a continual increasing demand for water systems to be installed in homes or other buildings not convenient to municipal plants. The Perry pneumatic water system is offered to purchasers as embodying important improvements which will appeal to the most exacting person.

This system eliminates the storage of water and delivers water to the faucets without storage, under uniform pressure, fresh from the well. The distribution of the water is by the Perry pneumatic pump, an illustration of which is presented herewith. Placed in the well, or any source of water supply, this pump is operated by compressed air which, by means of an automatic valve, forces the water alternately out of the two cylinders, producing a steady and continuous flow at high pres-



PERRY PNEUMATIC PUMP.

sure. The pump maintains an evenly high pressure of water at the faucets. It operates only when water is drawn, starting automatically when a faucet is opened and stopping when it is closed. Electric motors, gas or gasoline engines may be used for power of the Perry system, many installations being in operation throughout the country. See accompanying view of an electric motor installation of the Perry system. The United Pump & Power Co., Old Colony Building, Chicago, manufac-

amounts to practically nothing. The distance from the air reservoir to the pump in the well may be several thousand feet. This admits of placing the motor where it may be used for other purposes, or allows the addition of a Perry system to an existing power plant.

"Where current is available a motor installation is always recommended. The initial cost is less, owing to the smaller air reservoir required, the continuous current being always available for resupplying the reservoir with air. By using the Perry controller the motor is started automatically when more air storage is required and stopped when the desired pressure has been attained.

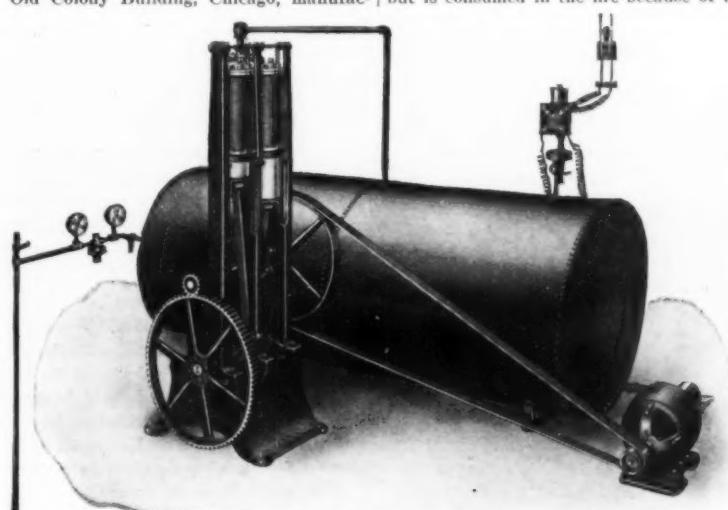
"Experience and observation show the cost of supplying water with motor-driven compressor to be less than two cents per thousand gallons at a 50-foot life, using as a basis a 12-cent per kilowatt rate. The operating expense is therefore a mere trifle.

"The capacity of this equipment would admit of the addition of one pump, doubling the delivery from the well, or, if desired, water from a cistern could be piped to the house with the same air-compressing outfit. This compressor would keep the two pumps supplied with air if water were drawn continuously from both at the same time."

An interesting book issued by the United Pump & Power Co. presents full details of the Perry system.

The Ellis Smokeless Downdraft Boiler

Inventors are continually introducing improvements in steam generating equipments, and Southern men have been well represented in the introduction of improved machinery of all kinds. William J. Ellis of Andrews, N. C., has recently introduced a new boiler for which various advantages are claimed. He has been assisted in his developments by C. W. Savage of Andrews. A boiler of the Ellis design has been built at the shops of the Chattanooga (Tenn.) Boiler & Tank Co., has been tested and is said to have proven the claims of the inventor. It is stated that practically no smoke is allowed to escape, but is consumed in the fire because of the



PERRY PNEUMATIC WATER SYSTEM.

tures the Perry system, and refers to it in part as follows:

"An installation of the Perry pneumatic water system will comprise a pneumatic pump, air reservoir, Perry compressor, electric motor and automatic electric controller.

"The motor, compressor and air reservoir may be installed in the basement of a residence, any outbuilding or at any convenient point, piping the compressed air to the pump, regardless of the distance to the well, as the friction in the air line

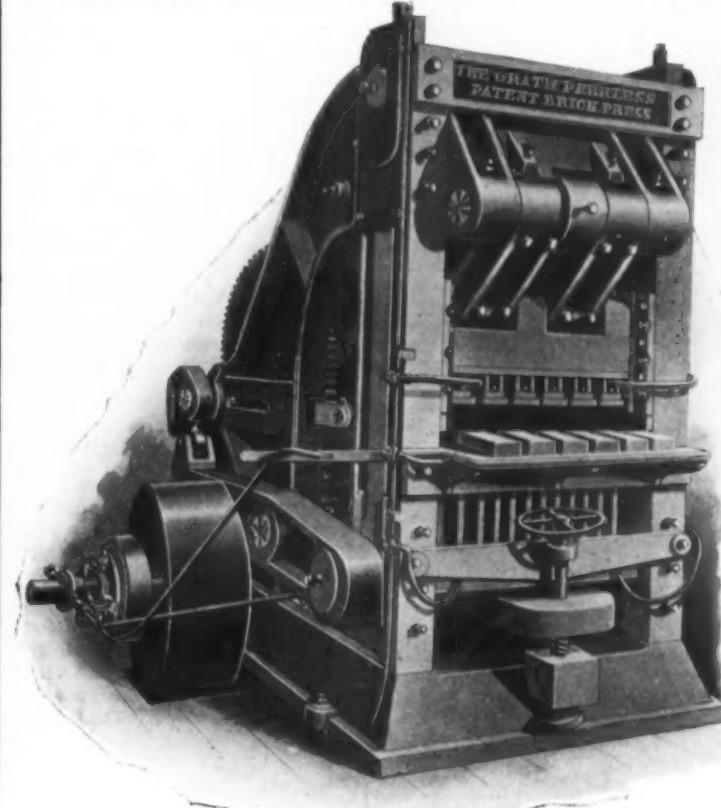
downdraft, and that at least two-thirds of the fuel is saved. One of the advantages of the new boiler is that, because of being fired from above, the attendant fireman need not come in close contact with the firebed, and thus his eyes are not affected by the heat. The Ellis boiler is patented for both stationary and locomotive engines, and in its use soft coal is preferable, as the more gases the coal contains the better will the boiler perform its functions. Mr. Ellis has patented this boiler in 13 leading countries of the world, and, with

associates, intends to organize a company for its manufacture, probably at several different points, but no locations have been chosen.

The Grath Brick Press.

Manufacturers of bricks and people who may think of engaging in brick manu-

facturing have been given considerable attention by inventors, and an accompanying illustration presents a view of the Acme fire extinguisher, manufactured by a pioneer in the introduction of chemical hand extinguishers for fire. It is claimed that this extinguisher is simple, reliable, durable, always ready, harmless, effective, and



ILLINOIS SUPPLY CO.'S SIX-MOLD PRESS.

facture are invited to investigate the Grath brick press, illustrated herewith. This six-mold brick press for dry or semi-dry clay or sand-lime bricks of the highest grade, and for Roman, Norman, Cuban and Spanish size bricks, is built by the Illinois Supply Co., 721 Century Building, St. Louis. Describing this press, the company says:

"Simplest, strongest and most powerful brick press. In a class by itself, the principle being a combined double cam and toggle movement so arranged and constructed to first give an initial pressure to the clay or shale, then release the pressure entirely in order to relieve the air in mass, and then the pressure is applied the second time and the brick is finished to a state of perfection. By this arrangement we can give full pressure to any clay or shale without causing any rebounding.

"Points of superiority: Exerts any pressure without danger of breakage of press or splitting of the brick as they come from mold; brick free from granulation or seam; brick absolutely perfect; double-gearied, with all gears in between frames and bearings; no side or cross breaking strain; balanced charger and lift-out movements; all parts above floor level and easy to get at; all parts subject to wear supplied with bushings or gibbs; all parts subject to strain made of best grade of steel; fitted with Grath mold box, simplest and best made and cheapest to replace; all gears, except master wheels, made of steel, with cut teeth; weight of four-mold press, 29,000 pounds; power required, 12 to 15 horse-power; capacity, 20,000 brick per day of 10 hours."

The Acme Fire Extinguisher.

An important device used in all kinds of industrial plants and buildings and elsewhere is the handy fire extinguisher for incipient blazes that might result in disastrous fires. Portable fire extinguish-

ers never fails to perform its functions. It is examined, tested and labeled under the direction of the Underwriters' Laboratories, Inc., and listed by the consulting engineers of the National Board of Fire Underwriters. Every Acme extinguisher is tested to 350 pounds hydrostatic pressure before leaving the factory. The are made



THE ACME FIRE EXTINGUISHER.

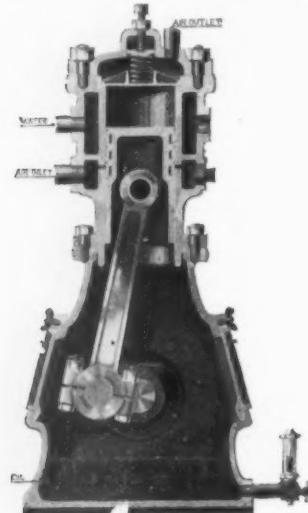
by the Missouri Lamp & Manufacturing Co., 128 Elm street, St. Louis.

New Gardner Air Compressor.

Engineers and others who are interested in air-compressing machinery will find their attention attracted to the accompanying illustration of the new air compressor being introduced by the Gardner Governor

Co., Quincy, Ill. The machine is a vertical high-speed type, described as follows by the company:

"It is enclosed and self-oiling. Enclosed feature should appeal particularly to users who are obliged to install machines in location where dirt and dust get into and cut out working parts, as in foundries or monumental stone works. Self-oiling is accomplished by the splash system, and the lubrication is so perfect that there isn't an oil hole in the compressor. The oil is put into the crank case to a certain fixed level indicated on machine. While in operation the splashers pins on crankshaft dip into this oil at every revolution, throwing it to all working parts



NEW GARDNER AIR COMPRESSOR.

and lubricating all bearings. Air piston is of trunk pattern, with three rings. Discharge valve is in upper end of air cylinder. It covers full opening of bore of cylinder and raises on its seat, forming a head. The piston in its upward or compression stroke travels past this seat about one-sixty-fourth inch. The compressed air lifts valve off its seat, making it impossible for piston to strike valve, thereby avoiding any possible breakages of pistons or heads that are usually a frequent occurrence with this class of machinery. Piston takes full stroke, so there is absolutely no clearance in cylinder. This gives compressor the highest possible efficiency.

"Another feature is entire absence of stuffing-boxes and crossheads. These usually require packing and keying up, so their elimination in this type simplifies the compressor in the extreme. The machine is noiseless even at its highest speed. The smaller sizes are designed for 600 R. P. M., and the larger from 400 to 500 R. P. M. In this type the operation is as smooth and satisfactory as other types at slower speeds. Owing, too, to the high speeds at which this compressor can be operated, it can in many instances be directly connected to motor and expense of a counter-shaft obviated.

"The air cylinder is water-jacketed, so a perfect water circulation can be obtained. The bearings are die cast bronze, renewable and interchangeable bushings. When worn they can easily be renewed, dispensing with babbittting. Compressor operators will appreciate this. Crank case has two hand-hole plates, one on either side, permitting easy access to connecting rod. These plates have glass bulb's eyes fitted into them for observing both oil level and splash.

"This compressor is so simple that no matter how inaccessible located, nor how inexperienced the attendants, its efficiency would not become impaired by neglect or inattention. All attendant has to do is to see that there is sufficient oil in crank case. The machine really takes care of itself.

There are practically no adjustments. There is one adjustment screw in the top of the compressor for regulating lift of valve to suit different conditions. When proper lift has been determined there is a jam-nut on this screw, which can be set so as to render machine noiseless at speed desired."

The Gardner Governor Co. has at present machines of this type from 4 to 80 feet capacities, both single and duplex patterns. It has a reputation for making the highest grade machinery, as is evidenced by its Gardner governors and steam pumps.

The multiplying uses to which compressed air is being constantly put makes this field an especially broad one. Almost every industry under the sun uses compressed air in one form or another. The maker of this high-speed machine recommends it particularly for cleaning cotton machinery, for automobile garage service, for operating air tools, and for other work where something simple and efficient is especially desired.

The Rothchild Engine.

All who are interested in steam-engine improvements are urged to investigate the equipment being introduced by the Rothchild Engine Co., 102 Centre street, New York. This company is building an improved engine, the main feature of which is its valves, and they can be used on any engine to increase the number of revolutions per minute. It is claimed that the new engine embodies improvements which greatly increase economy and efficiency. An illustration of the Rothchild engine is presented herewith. The company says:

"The object of this invention is to furnish an engine that shall have the economy of the most perfect type of present stationary engine, simpler in construction and more convenient to operate than any engine of the reversible kind now in use. It differs from all other inventions of this kind by being more economical, simple and reversible at the same time. This step will be found of such importance to the users of all kinds of engines that are now necessarily very wasteful and complicated that it leaves no doubt as to the future commercial value of this new type of engine and the displacement of the old.

port in the valve casing is equal in width to the blank space between any two ports on the cylindrical valve. It will be seen from this that the engine can obtain steam by moving in either direction.

"The forward and backward movement of the engine is controlled by the cut-off within the cylinder valve (as shown by the part circle in cut).

"The cut-off separates the live steam from the exhaust, and its port arrangements are such that they control in the most economical way both the admission and exhaust of steam, according to the load or speed required.

"The cut-off extends beyond the valve casing far enough to permit the attachment of the controlling lever. The cut-off may be moved or changed at pleasure—without detriment to the exhaust—to expose the port either for a forward or backward movement of the engine, depending upon which way the cut-off is tilted. The position of the cut-off also controls the amount of steam to be admitted to the piston.

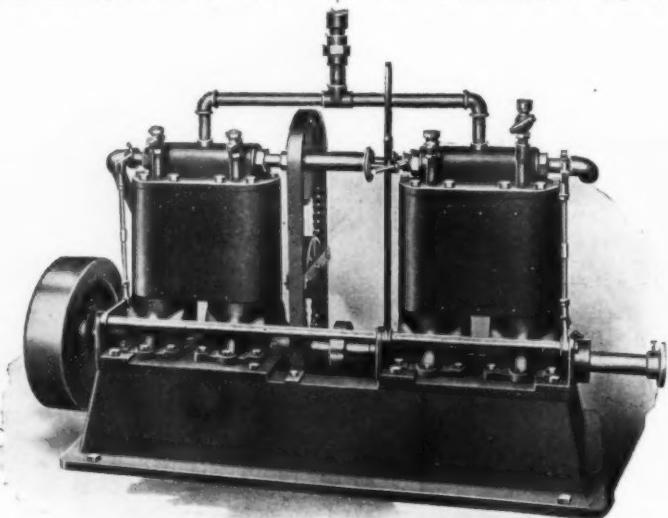
"By this construction it will be observed that we have a continuous rotary valve movement between a stationary case and a cut-off which may be varied to suit the occasion or circumstances. This enables the valve to enter unimpeded steam at a positive point for the piston to receive same.

"The variable cut-off inside of the cylindrical valve cuts off the supply of steam at any desired point of the stroke to suit the occasion, and may be operated by hand or governor.

"The seating contacts of movements contained in the valve are self-sealing and arranged so as to take up their own wear by differential pressure.

"This engine differs radically from all other cut-off engines in consequence of the continuous rotary movement of the valve, giving the latter a movement in one direction, so that it can be met and regulated as to its steam admission with very slight movement of the cut-off, and this is only necessary when there is a change of load requiring a different amount of steam or a change of direction requiring the reversing of the engine; otherwise the cut-off remains stationary.

"The entire control of the engine as to



THE ROTCHILD ENGINE.

"The valves of this engine differ from all others, both as to location and movement. They are located in the cylinder heads and driven by a continuous rotary motion taken from the main shaft, the latter making three revolutions to one revolution of the valve.

"The valve is cylindrical in shape, and has three ports at equal distance on its circumference, thereby employing one port for each revolution of the main shaft. The

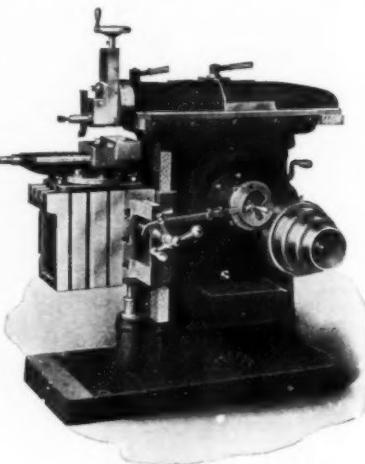
starting, stopping, regulating or reversing is done by one simple lever conveniently located to the operator.

"All joints and connections along the line of movements of the valve are of the toggle type, permitting an easy and flexible movement, also providing a thrust endways to make steam joints in place of stuffing-boxes, and permitting the valve to seat without being interfered with by the motion of the stem."

A 16-Inch Back-Geared Shaper.

An accompanying illustration will attract the attention of people interested in improved shapers. It presents a view of the 16-inch back-geared shaper manufactured by the John Steptoe Shaper Co., Cincinnati, Ohio.

This shaper has, in addition to its single gear ratio of $6\frac{3}{4}$ to 1, a back gear which increases this to 20 to 1. The back gears consist of a sleeve to which two gears are attached. These gears are splined to the shaft, and are therefore constantly running with it. By means of a second sleeve these gears are shifted at the will of the operator by a lever at the back of the column,



A 16-INCH BACK-GEARED SHAPER.

which is placed in an upright position within easy reach of the operator. The speed is thereby increased or decreased, and the power increased or decreased as may be desired.

The feed plate is different from the usual design. The feed eccentric is pivoted, so that it can be swiveled in any direction. The holes in the plate are drilled and reamed tapered to receive a tapered pin to take up any wear which may occur. The holes are drilled and numbered in accordance with the teeth in the feed ratchet, making it very easy to secure any desired feed.

The vise base is plainly graduated and the upper jaw has two bolts to allow clamping to lower jaw, with the object of overcoming the tendency to raise the work as it is tightened in the vise.

Another convenient feature is the locking of the head, which can be instantly loosened or tightened by the handle directly behind it. This operates an eccentric stud and pulls the head squarely against the front of the ram.

The length of stroke is varied by means of the lever projecting through the feed plate, and can be performed while the machine is in motion. The device in the bull gear is self-locking, and is held firmly in position as soon as the adjusting lever is taken off of the shaft, thus avoiding the necessity of locking the shaft in position.

The telescopic screw under the table is fully enclosed, thereby avoiding the possibility of oil and chips getting under the base.

The operating side of the machine is very rigid, being braced by the basin-shaped projection, in which a large amount of metal has been placed.

The shaft bearings are provided with cast-iron bushings. These bushings are made a tight fit, and are pressed in place, but can be very readily removed and replaced at any time. The shaft bearings are provided with ring oilers. The rings are made of wide strips of brass, thereby giving a liberal contact on the shaft and distributing the oil more freely than a round ring.

Construction Department

TO OUR READERS!

In order to understand and follow up properly the Construction Department items, please bear in mind the following statements:

EXPLANATORY

The MANUFACTURERS' RECORD seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with everyone interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the MANUFACTURERS' RECORD.

ADDRESS FULLY

To insure prompt delivery of communications about items reported in these columns, the name of one or more incorporators of a newly incorporated enterprise should be shown on the letter addressed to that town, or to the town of the individual sought, as may be shown in the item, as sometimes a communication merely addressed in the corporate or official name of a newly established company or enterprise cannot be delivered by the postmaster. This will help to insure prompt delivery of your communication, although it is inevitable that some failures on the part of the postal authorities to deliver mail to new concerns will occur.

WRITE DIRECT

It is suggested to advertisers and readers that in communicating with individuals and firms reported in these columns, a letter written specifically about the matter reported is likely to receive quicker and surer attention than a mere circular.

BRIDGES, CULVERTS, VIADUCTS

Dallas, Texas.—Jack Witt, County Engineer, prepared plan of proposed bridge at Miller's Ferry; estimated cost, \$90,000.

Grafton, W. Va.—City, Taylor County Court and Grafton Traction Co. are considering construction of steel bridge across Tygart Valley River. Address The Mayor.

Malvern, Ark.—Hot Springs County Bridge Commission will open bids May 27 for two steel bridges over Ouachita River, at Green's Ferry and Grigsby's Ford; estimated cost, \$25,000; Andrew I. Rowland, county judge. (See "Machinery Wanted.")

Shawnee, Okla.—Shawnee-Tecumseh Traction Co. awarded contract to Illinois Steel Bridge Co., through its general agents, Hughes & Hammond, Kansas City, Mo., for construction of 95-foot steel-span bridge and reconstruction of trestle across Canadian River.

Weatherford, Texas.—Bids are invited on construction of bridge across Town Creek; 100 feet wide, with six-foot walk on each side; concrete; cost \$10,000. Address The Mayor.

CANNING AND PACKING PLANTS

Americus, Ga.—Raymond Orchard Co. incorporated with \$175,000 capital stock; will preserve fruits, manufacture syrups, cultivate tobacco, establish canneries, etc.

Campi, La.—Campi Fruit Preserving Co. organized with E. W. Breazeale president, secretary and treasurer; Chas. D. Keator, manager; G. Rene Cloutier, vice-president; will manufacture fruit preserves; will erect frame building 40x60 feet, of ordinary construction. (See "Machinery Wanted.")

Center, Texas.—Shelby County Canning Co., J. O. Cooper, president, recently reported organized, will establish fruit and vegetable cannery; daily capacity, 8000 cans; machinery ordered; will erect mill-construction building; cost of plant, \$5000.

Gravette, Ark.—Gravette Cold Storage, Canning & Packing Co. Incorporated with

\$50,000 by E. M. Gravette, J. T. Oswalt, E. L. Chatfield and others.

Harrisonburg, Va.—Eastern Preserving & Canning Corporation Incorporated; R. C. Bell, president; V. R. Slater, secretary.

Natchez, Miss.—Natchez Canning & Manufacturing Co., recently reported incorporated, has secured site and begun construction of proposed cannery; machinery purchased.

Stephens, Ark.—Stephens Canning & Manufacturing Co. Incorporated with \$10,000 capital stock; J. S. Thompson, president.

CLAYWORKING PLANTS

Baltimore, Md.—Fire Brick—Vulcan Fire Brick Co. Incorporated with \$200,000 capital stock by C. G. Chevalier, 401 North St.; W. T. Stillwell, 218 E. Lexington St., and Joseph P. Tuiley.

North Mountain, W. Va.—Bricks, Sewer Pipe, etc.—American Clay Machine Co., Bucyrus, Ohio, will, it is reported, establish brick plant at North Mountain; also manufacture sewer pipe and other terra-cotta products; capacity, 100,000 bricks daily.

Sardinia, S. C.—T. H. McFadden, Mayville, S. C., and J. H. Garland, Sardinia, are interested in establishment of brick factory.

Seguin, Texas—Bricks.—Seguin Vitrified Paving and Face Brick Co. Incorporated with \$75,000 capital stock; O. G. Pearson, president; H. M. Wurzbach, vice-president; R. L. Wupperman, secretary; C. E. Tipts, treasurer; will improve present plant and add new vitrified-brick plant, installing machinery to cost about \$20,000; will take over plant of Lone Star Brick Co. (See "Machinery Wanted.")

St. Albans, W. Va.—Brick.—Hess & Blazer, Point Pleasant, W. Va., will establish brick plant at St. Albans to cost \$10,000.

Tuscaloosa, Ala.—Bricks.—Tuscaloosa Brick Co., A. McRae, manager, 1214 Twenty-sixth Ave., will install brick machinery; cost \$3000; contract placed; capacity, 30,000 bricks daily.

Washington, Ga.—Brick.—Washington Brick Co. Incorporated with \$40,000 capital stock; O. S. Barnett, A. C. Barnett and W. A. Slaton.

COAL MINES AND COKE OVENS

Clifft, Tenn.—Clifft Consolidated Coal Co., Wm. B. Young, general manager, has completed organization; acquired properties of Clifft Creek Coal & Coke Co. and Caney Fork Gulf Coal Co.; will increase capacity to 1500 tons daily; E. M. Jones, 1125 James Bldg., Chattanooga, Tenn., consulting engineer.

Dawson, Okla.—Brummett Coal Co. plans to improve plant, increasing daily production to 400 tons. H. F. Schweer, cashier of First National Bank, Denton, Texas, is president Board of Directors.

Hartshorne, Okla.—Rock Island Coal Mining Co., Carl Scholz, vice-president, 430 Old Colony Bldg., Chicago, has placed order with Ottumwa Box Car Loader Co., Ottumwa, Iowa, for \$10,000 steel tipple at Hartshorne.

Pocahontas, Va.—Big Vein Pocahontas Coal Co., Baltimore, Md., recently noted incorporated (under Tazewell, Va.) to develop leased Browning properties, will erect buildings and install electrical equipment; buildings include boiler-house 106x50 feet, machine shop 90x40 feet and 50x40-foot blacksmith shop; intended output, 2000 tons daily; Thos. T. Boswell, Baltimore, Md., president and general manager; Edward T. Boswell, also of Baltimore, secretary and treasurer; Jno. E. Ambrose, general superintendent; A. D. Macfarland, engineer in charge. (See "Dwellings.")

Russellville, Ark.—Fidelity Coal Mining Co., R. A. Long, president, R. A. Long Bldg., 10th and Grand Aves., Kansas City, Mo., will take over and operate for a period of years the property of Russellville Anthracite Coal Mining Co., consisting of one shaft and one slope mine.

Spadra, Ark.—W. H. Taylor, recently noted to install mining machines and resume coal operations at Spadra, represents Enterprise Coal Co., 17 Battery Pl., New York; Mr. Taylor is proprietor; mines, about 8000 acres; anthracite; developed capacity, 1200 tons daily; no coke ovens.

Staunton, Va.—J. G. Yeager reported as considering development of coal mines in Augusta county.

CONCRETE AND CEMENT PLANTS

Siloam Springs, Ark.—W. P. Chapman will construct plant for manufacture of cement bricks.

Taylor, Texas.—S. M. Goodwyn will construct factory to manufacture vitrified brick, building block, cement walks, etc.; machinery is being received.

Urbania, Va.—City will establish plant to manufacture cement blocks for paving sidewalks. Address The Mayor.

Weatherford, Okla.—Southwestern Development Co. of Oklahoma City will build proposed Portland cement plant mentioned recently; will construct fireproof buildings and install machinery to include soft-coal producer-gas apparatus, oil burners for rotary kilns, etc.; company's president is C. F. Eberle, Deer Creek, Okla.; secretary and architect in charge is C. B. Blake, Weatherford, who should be addressed; he is considering proposals for machinery. (See "Machinery Wanted.")

COTTON COMPRESSES AND GINS

Alpharetta, Ga.—Wright, Shirley & Bagwell will establish cotton gin.

Barton, Ala.—Ashcraft Cotton Mills, Florence, Ala., will install new outfit in gin at Barton, including engine, boiler and 3-ton saw gin. (See "Machinery Wanted.")

Clover, S. C.—W. B. Stroup and associates will establish eight 70-saw gin plant. (See "Cottonseed-oil Mills.")

Dublin, Ga.—J. T. Mercer will be manager of cotton gin to be established.

Fort Lawn, S. C.—W. L. Abernathy is interested in establishment of six-stand ginnery; electric power. (See "Cottonseed-oil Mills" and "Machinery Wanted.")

Fort Worth, Texas.—Interstate Compress Co. Incorporated with \$400,000 capital stock by R. J. Davis, F. A. Blain, I. Brown and others.

Montgomery, Ala.—Farmers' Compress & Warehouse Co. will erect cotton gin and warehouse; concrete walls; steel siding; composition roof; fireproof construction; electric lights; will install gin compress.

Mt. Olive, Miss.—R. E. Deen, R. F. D. No. 1, contemplates erection and equipment of gin to replace two-gin stand plant recently destroyed; will not build until fall.

Quanah, Texas.—E. T. Rosamond, Stamford, Texas, will establish cotton gin at Quanah.

Seneca, Ga.—W. J. Horton will establish cotton gin; air-blast system.

Turbeville, S. C.—Hon. D. L. Green is interested in establishment of cotton gin. (See "Cottonseed-oil Mills.")

Union City, Tenn.—Union City Ginning Co., recently reported incorporated with \$3000 capital stock, has organized with George S. Hardy president, J. P. Verhilm vice-president, J. J. Fuqua general manager and treasurer, H. A. Bransford secretary; will establish cotton gin; machinery ordered.

Uiten, Okla.—J. W. Pruitt is interested in establishment of four-stand cotton gin.

Waxahachie, Texas.—Winfield Scott, Fort Worth, Texas, will establish cotton gin at Waxahachie.

Winson-Salem, N. C.—Briggs-Shaffner Company, Incorporated, has purchased cotton gin; will enlarge building and increase capacity of plant.

COTTONSEED-OIL MILLS

Clover, S. C.—W. B. Stroup and associates will establish 20-ton cottonseed-oil mill recently mentioned; will use electric-power for mill and ginnery.

Darlington, S. C.—Crigler & Cates, Spartanburg, S. C., have purchased Cheraw Oil Mill; will make improvements and enlarge.

Fort Lawn, S. C.—W. L. Abernathy is interested in establishment of 20-ton oil mill and 6-stand ginnery; electric power. (See "Machinery Wanted.")

Knox City, Texas.—Kendrick & Lunsford will establish cottonseed-oil mill; will erect building.

Sharon, S. C.—Dr. Jos. H. Saye and associates will erect 20-ton cottonseed-oil mill; steam-power.

Tulsa, Okla.—F. G. Kinney, Tulsa Cottonseed Oil Co., is proceeding with erection of \$80,000 plant recently described; plant to be ready for operation this season; estimated daily capacity, 80 tons seed.

Turbeville, S. C.—Hon. D. L. Green is interested in establishment of cottonseed-oil mill and ginnery.

ELECTRIC-LIGHT AND POWER PLANTS

Alpine, Texas.—Alpine Power Co. Incorporated with \$35,000 capital stock by H. W. Townsend, R. B. Slight and J. H. Derrick; will operate electric-light plant, construct water-works, manufacture ice, and later contemplate building sewer system under increased capitalization.

Arvonia, Va.—Philadelphia Trust & Securities Co., Wilmington, Del., plans to build water-power-electric plant on Slate River, one and a half miles from Arvonia; dam to be 60 feet high; develop 2000 brake horsepower at normal stage; cost of plant \$300,000; C. P. E. Burgwyn, Richmond, Va., engineer in charge.

Atlanta, Ga.—Towaliga Falls Power Co. will issue \$100,000 of bonds and improve power plant.

Atlanta, Ga.—Coosawattee & Mountaintown Rivers Power & Improvement Co., reported incorporated last week, has not received definite plans for proposed water-power development; Hall Bros., 413 Temple Court, Atlanta, engineers in charge, estimate 4000 to 5000 horse-power can be developed; contemplate construction of 100-foot dam.

Augusta, Ga.—James U. Jackson, vice-president Augusta Alken Railway & Electric Co., and associates are not prepared to state details of proposed water-power-electric plant referred to last week; property is on Saluda River, Lexington county, South Carolina, estimated to furnish 7500 primary and 4000 secondary horse-power; Duncan & Lyndon, 1204 Wallace Bldg., 56 Pine St., New York, engaged as consulting engineers to report on feasibility of development and design plant.

Beaufort, S. C.—City has disposed of \$43,000 bond issue for construction of water-works, electric-light plant and town hall. Address The Mayor.

Charleston, S. C.—Citizens' Electric Light & Power Co. petitioned City Council for franchise to construct and operate electric-light and power plant. J. Waties Waring and James P. Gibbs are interested in company.

Chickasha, Okla.—Chickasha Light, Heat & Power Co. will reconstruct plant; will replace present 1100-volt plant with 3-phase, 60-cycle, 2300-volt plant, and install additional boilers; steam turbines will probably furnish motive power; generating capacity to be 600 kilowatts; will erect fireproof brick and concrete power-house.

Damascus, Va.—Damascus Light & Power Co. increased capital stock from \$500 to \$10,000.

Denison, Texas.—Denison Light & Power Co. increased capital stock from \$125,000 to \$200,000.

El Dorado Springs, Mo.—City voted to grant franchise to B. F. Proctor for construction of electric-light plant.

Fayette, W. Va.—Fayette Railway Co., L. D. Lacy, Richmond, Va., president, contemplates erecting power-house at Fayette.

Greensboro, N. C.—North Carolina Sanatorium for Treatment of Tuberculosis will build power plant to furnish heat, power, water and light, and will construct sewerage system; General Assembly appropriated \$30,000, making compulsory work mentioned; remainder of appropriation for casino and four additional buildings, all of open-air construction.

Hampton, Ga.—City will vote May 10 on issuance of \$20,000 electric-light and water-works bonds. Address The Mayor.

Honaker, Va.—Town Council has drafted ordinances for electric-light and water companies, which will soon be offered. Address Town Clerk.

Little Rock, Ark.—City is considering issuance of \$65,000 of bonds for electric-light plant. E. A. Kingsley, City Engineer.

Louisburg, N. C.—G. W. Ford has purchased and will develop water-power about eight miles from Louisburg; will transmit electricity to Louisburg. (See "Machinery Wanted.")

Hendersonville, N. C.—Green River Power Co., lately reported incorporated with \$100,000 capital, has organized with W. A. Mauney, King Mountain, N. C., as president and J. M. Torrence, Waynesville, N. C., secretary-treasurer; will develop several water-powers, but has not decided any details.

Marshall, N. C.—North Carolina Electrical Power Co., W. T. Weaver, president, Asheville, N. C., telegraphs the Manufacturers' Record that proposed plant lately noted will cost about \$400,000; will construct masonry dam 36 feet high and 600 feet long; will install three units of 1250 kilowatts each; initial voltage 6600, transmitted at 30,000 volts; location, French Broad River two miles below Marshall, N. C.; C. E. Waddell, Biltmore, N. C., engineer in charge.

Monroe County, W. Va.—B. F. Mann, Fort Spring, W. Va., reported as having purchased land on Second Creek, in Monroe county, and to build water-power-electric plant; understood that he will build three dams and as many power plants, which will furnish power to operate a proposed electric railway from Ronceverte to Rich Creek.

Quincy, Fla.—City voted bond issue of \$9000 for electric-light plant improvements and extension; B. A. Puckett, superintendent water and light plant; Herbert A. Love, Mayor. (Recently noted.)

Sparta, Tenn.—A. & T. Power Co. incorporated with \$10,000 capital stock by J. T. O. H., J. M. and S. B. Anderson, J. R. Tubb and J. L. Nolin.

Texas City, Texas.—The Texas City Co., A. B. Wolvin, president, Duluth, Minn., will probably build electric-light plant. (See "Warehouses.")

Troy, Ala.—Standard Chemical & Oil Co. will rebuild burned electric-light plant.

FLOUR, FEED AND MEAL MILLS

Buena Vista, Va.—Buena Vista Mills will install new machinery and increase capacity from 100 to 125 barrels daily.

Covington, Tenn.—Covington Milling Co. incorporated with \$10,000 capital stock; Daniel Fife, Sr., president; P. W. Williams, vice-president and general manager; Braxton Boyd, secretary and treasurer; will erect building and install machinery purchased from Tipton Flouring Mills.

Cosby, Tenn.—Cosby Mill Co. (J. W. Padgett and H. H. Schults) will establish roller mill recently mentioned; will erect wood structure, 22x34 feet; cost \$600; daily capacity, 35 barrels; no machinery needed.

Hurricane, W. Va.—Hurricane Milling Co. incorporated with \$20,000 capital stock by H. J. Baumgardner, W. O. Baumgardner, Joseph Jordan and others.

Munday, Texas.—W. W. McCarty will establish grist mill.

FOUNDRY AND MACHINE PLANTS

Alexandria, Va.—Steam Pumps.—Emerson Steam Pump Co., Prince St. and Strand, informs Manufacturers' Record that its new plant, mentioned last week, will probably cost \$50,000 or more; Dodge & Day, 608 Chestnut St., Philadelphia, Pa., will complete plans and specifications in about 30 days.

Alexandria, La.—Foundry.—Ruston Foundry and Machine Shops, Ruston, La., contemplate, it is reported, establishment of plant at Alexandria.

Atlanta, Ga.—Foundry.—Atlanta Sash Weight Foundry and Machine Works incorporated with \$5000 capital stock.

Baltimore, Md.—Gas and Heating Apparatus and Structural Iron Work.—Bartlett-Hayward Co. incorporated with \$1,500,000 capital stock by E. Bartlett Hayward, Daniel Conklin, Howard Bruce and others; will continue Bartlett, Hayward & Co., Scott and McHenry Sts.

Birmingham, Ala.—Car Door Equipment.—Bullard Car Door Equipment Co., 1030 Woodward Bldg., R. G. Bullard, president, contemplates erection of malleable foundry with capacity for manufacturing equipments for 10,000 doors daily; location undecided. (Recently noted under "Miscellaneous Manufacturing Plants." Atlanta.)

Bristol, Va.—Foundry.—Dominion Iron Works organized with \$50,000 capital stock; consolidation of Bristol Stove & Foundry Co., Bristol, and Johnson City Foundry & Machine Works, Johnson City, Tenn.

Buena Vista, Va.—Foundry.—Buena Vista Foundry Co. has reorganized with W. T. Robey president, H. M. Long vice-president, B. C. Heywood secretary and treasurer; will enlarge plant and increase output.

Chattanooga, Tenn.—Engines.—Union Engineering Co., W. C. McNabb, proprietor, care of Stoqua Motor Boat Supply Co., 118 East 8th St., Chattanooga, will manufacture gasoline engines; stationary, auto and marine; engines now being made at plant of Ross-Meehan Foundry Co., Carter and West Main Sts., Chattanooga.

Dalton, Ga.—Stoves.—Mascot Stove Manu-

facturing Co. is considering machinery and supplies for stove foundry recently noted; D. C. Jones to be general manager. (See "Machinery Wanted.")

Kansas City, Mo.—Machines.—Bauer Machine Works will erect addition to plant; outside dimensions will be increased from 50x100 feet to 75x133 feet; three stories will be added, making entire structure five stories.

Winchester, Ky.—Bottle-washing Machine. Wm. Haggard contemplates organization of company to manufacture patented bottle-washing machine.

GAS AND OIL DEVELOPMENTS

Ardmore, Okla.—Prospect Oil Co. incorporated with \$25,000 capital stock by J. S. Cadet, J. F. Robinson, Harrold Wallace and others.

Ardmore, Okla.—Poland Gas & Oil Co. organized with \$25,000 capital stock; W. P. Poland, president; Joe F. Robinson, vice-president; A. V. Doak, treasurer; Geo. H. Webb, secretary.

Chelsen, Okla.—Otter Oil & Gas Co. incorporated with \$10,000 capital stock by J. W. Swarts, G. A. Tibbs and A. E. Paulger.

Parkersburg, W. Va.—Standard Oil Co., main office, 26 Broadway, N. Y., will erect acid-restoring plant in Parkersburg to replace present structure; cost \$6000.

Sapulpa, Okla.—Big Oil Co. Incorporated with \$40,000 capital stock by B. C. Burnette, Joseph Bruner and L. B. Jackson.

St. Louis, Mo.—Missouri Natural Gas Co. organized at Pittsburgh, Pa., by Perry O. Latzghner, Pittsburgh; J. D. Wise, James Thomas, both of St. Louis, and others; leased 50,000 acres of oil land near Carlinville, Ill., and will pipe oil to St. Louis.

ICE AND COLD-STORAGE PLANTS

Alpine, Texas.—Alpine Power Co. incorporated with \$35,000 capital stock by H. W. Townsend and others; will establish plant. (See "Electric-light and Power Plants.")

Baltimore, Md.—City awarded contract at \$4236.65 to Ammen Machinery & Supply Co., 324 North Holliday St., Baltimore, for refrigerating plant for city morgue and bacteriological laboratory of Health Department.

Corinth, Miss.—Citizens' Ice Co., recently reported incorporated with \$15,000 capital stock, has purchased 25-ton plant of Corinth Ice Co.; A. Rubel, president; G. A. Hazard, secretary; S. L. Nelson, manager.

Durant, Miss.—Durant Ice & Coal Co. will establish 10-ton ice plant; will erect \$2500 building, 50x40 feet, of ordinary construction; machinery purchased. (Recently noted as "Castleberry Bros.")

Gravette, Ark.—Gravette Cold Storage, Canning & Packing Co. incorporated with \$50,000 capital stock by E. M. Gravette, J. T. Oswalt, E. L. Chatfield and others.

Lancaster, S. C.—W. G. Langley, Lancaster, has contract for erection of proposed ice plant.

Miami, Fla.—James P. McQuade will, it is reported, establish cold-storage plant, lumber yard and erect warehouse.

Wynnewood, Okla.—Establishment of ice plant is contemplated; A. L. Luke may be addressed. (See "Machinery Wanted.")

IRON AND STEEL PLANTS

Buena Vista, Va.—Iron Furnace.—Oriskany Ore & Iron Corporation has blown in its Buena Vista furnace; capacity, 150 tons daily of basic and car-wheel iron; stack is equipped with both sand and chill beds; W. O. Spangler is superintendent at Buena Vista; company's main offices, Iron Gate, Va. (Recently mentioned.)

Holidays Cove, W. Va.—Tinplate Mill.—Phillips Sheet & Tin Plate Co., D. M. Weir, secretary-treasurer, Clarksburg, W. Va., has begun erection of sheet and tin plate mill; so constructed that extension can be easily made; present plan is to construct eight-mill plant, with 12 sets of cold rolls, to have capacity of 25,000 tons annually; all buildings of steel, brick and concrete; construction under direct supervision of company; bids for machinery should be addressed to George Mende, purchasing agent; company will also erect dwellings and establish new town—Weir City; approximate expenditure, \$1,000,000. (This is plant recently mentioned to be built by W. G. Brangham, who has become interested in Phillips company.)

Lafayette, Ga.—Iron Furnace.—Pigeon Mountain Iron Co., Jos. C. Haas, president, Montgomery, Ala., may build iron furnace in future. (See "Mining.")

LUMBER-MANUFACTURING PLANTS

Arkansas City, Ark.—Deshaw Lumber Co., C. W. Hyde, president, has had plans prepared by R. J. Ensign, Memphis, Tenn., for lumber plant; will erect main building 120x36 feet; boiler, engine and filing rooms separate; mill construction; cost of building, \$5000; will install band mill, to cost \$10,000; capacity, 30,000 feet hardwood lumber daily; machinery purchased.

Dickson, Tenn.—Dickson Planing Mill Co. incorporated with \$20,000 capital stock by D. T. Self, J. T. Crain, V. B. Miller and others.

Grady, Ark.—Varner Land & Lumber Co., Maplewood, Mo., will establish sawmill at Grady; cost of sawmill machinery \$3500; daily capacity 25,000 feet; will also erect small houses; cost of buildings \$4000; G. W. Allport, 7327 Vine Ave., Maplewood, member of company.

Hamburg, Ark.—J. L. Durham will establish planing mill to cost \$6000.

Houston, Texas.—Thompson-Tucker Lumber Co. has increased capital stock from \$60,000 to \$80,000.

Houston, Texas.—C. A. Dyer, General Delivery, will install mill to manufacture 40,000 feet of pine timber.

Junction City, Ark.—Junction City Lumber Co. increased capital stock from \$40,000 to \$75,000.

Kingsland, Ark.—Kingsland Lumber Co. incorporated with \$60,000 capital stock; B. Paynter, president; W. P. Barnett, vice-president; E. R. Buster, secretary and treasurer.

Mansfield, Ark.—J. E. Hickerson will establish planing mill.

Marion, N. C.—Brown-Hewitt Lumber Co. recently reported incorporated with \$25 capital stock, purchased plant of J. M. Brown; manufactures general building materials; daily capacity, three cars finished material; J. M. Brown, president; A. R. Buffaloe, vice-president; A. C. Hewitt, secretary-treasurer.

Miami, Fla.—James P. McQuade will, it is reported, establish lumber yard, cold-storage plant and erect warehouse.

Mobile County, Ala.—W. H. Gillen, Milwaukee, Wis., is reported as negotiating for hardwood acreage in Macon county, Alabama, and in Mississippi.

Norfolk, Va.—Norfolk Veneer Co., George W. Roper, president, will rebuild plant reported burned; loss \$100,000.

Pamlico County, N. C.—D. H. Greene, Box 555, Newbern, N. C., will erect mill in Pamlico county to develop hardwood timber recently purchased. (See "Machinery Wanted.")

St. Louis, Mo.—Schaerff, Pfau & Ganahl Planing Mill Co. incorporated with \$25,000 capital stock by Louis J. Ganahl, Joseph Pfau and Robert Schaeff.

Sycamore, Tenn.—Althauser-Webster-Weaver Lumber Co. (organized by William Althauser, Charles Webster, both of Greenbrier, Tenn., and D. Weaver, Nashville, Tenn.)

has, it is reported, purchased for \$65,000 about 1300 acres of timber land at Sycamore, estimated to cut 10,000 feet; will establish band-saw mill with capacity of 25,000 feet hardwood lumber daily; cost \$3000; operations to begin June 1.

Wynne, Ark.—Crawford Bros., H. F. Crawford, president, will establish sawmill with 15,000 feet daily capacity; will erect buildings 32x80, 25x35 and 16x24 feet; mill construction; cost \$1200; machinery purchased; manufacture quartered oak and hickory.

MINING

Avard, Okla.—Molybdenite.—Van Tyne Prichard contemplates, it is reported, developing molybdenite deposits near Avard.

Baltimore, Md.—Stone.—Wm. B. Ehlen, 10 East Lexington St., and associates will develop stone quarry.

Cedartown, Ga.—Iron.—Pittsburg-Bartow Mining & Manufacturing Co. incorporated with capital stock of \$125,000 to develop iron-ore property in Bartow county; has completed railway siding, installed mining and loading machinery, and will begin shipping large tonnage; Geo. M. Koehnline, president, Bridgeport, Ohio; Walter Kennedy, consulting engineer, Pittsburg, Pa.

Columbia, Tenn.—Phosphate.—Independent Phosphate Co. is planning construction of plant with daily capacity of 400 tons of phosphate; plant will require two large crushers, two elevators, two drier cylinders, two boilers of 150 horse-power each, Corliss engine of 200 horse-power, air compressor with battery of drills, shafting, etc.; will also equip mines with tramcars, etc. A. H. Reed is engineer in charge; O. L. Dorch is general manager. (Recently mentioned.)

Fort Worth, Texas.—Fullers Earth.—American Fullers Earth Co. has increased capital stock from \$30,000 to \$300,000.

Lafayette, Ga.—Iron.—Pigeon Mountain Iron Co. has purchased 3700 acres of red iron-ore land near Lafayette for development; price reported as \$120,000 and land estimated to contain over 75,000,000 tons of ore; Jos. C. Haas, Montgomery, Ala., president; R. W. Watson, Atlanta, Ga., vice-president; Edwin Haas, also of Atlanta, secretary-treasurer; company recently incorporated with capital stock of \$500,000; may build iron furnace in future.

Llano, Texas.—Minerals.—Los Almagres Mining Co. recently reported incorporated with \$6000 capital stock, has elected the following officers: J. Farley, president; J. J. Deaver, superintendent; F. M. Ramsey, vice-president and general manager; Ferdinand Miller, secretary-treasurer; will develop 2500 acres land; main office to be at Llano; present address, Lampasas, Texas.

Rome, Ga.—Bauxite.—National Bauxite Co. has leased 290 acres of land, and will develop for bauxite deposits.

Salisbury, N. C.—Granite.—W. A. Esson Granite Co. incorporated with \$1,250,000 capital stock; is merger of Balfour Pink Granite Co., Asheville, N. C.; Rowan Granite Co., and American Stone Co., both of Salisbury.

Salisbury, N. C.—Carolina Mining & Realty Co. incorporated with \$125,000 capital stock by J. Q. Foreman and others.

Warren Plains, N. C.—Marble.—Frank M. Tucker has begun development of white marble deposits; estimated capacity, carload daily; will build three-quarter-mile spur track.

MISCELLANEOUS CONSTRUCTION WORK

Charleston, S. C.—Seawall.—Bowe & Page of Charleston are lowest bidders, at \$206,000, for construction Battery seawall and for filling in of boulevard tract; Simons-Mayrant Company, Charleston, at \$62,310, for filling work, taken separately from seawall construction, and of Charleston, at \$62,310, for filling work, taken separately from seawall construction, and McLean Contracting Co., Maryland Trust Bldg., Baltimore, Md., at \$157,700, on seawall. J. H. Dingle, City Engineer. (Recently mentioned.)

Galveston, Texas.—John M. Murch, County Auditor, Galveston, Texas, will receive bids until June 28 for construction of causeway across Galveston Bay between Galveston Island and Virginia Point, recently mentioned; entire causeway will be 10,642 feet long; arch bridge portion will be 2472 feet long; lift drawbridge will have clear span of 100 feet; roadway or dirt portion about 8170 feet long; cost estimated at \$1,400,000. (See "Machinery Wanted.")

Greenville, Miss.—Levee Work.—Bids will be opened May 17 for construction of 850,000 cubic yards of embankment in Mississippi Levee District; C. H. West, chief engineer. (See "Machinery Wanted.")

LaSalle County, Texas.—Irrigation.—National Land & Sub-Irrigation Co., John L. Wiggins, president, Kansas City, Mo., purchased 420 acres in LaSalle county and will construct system of irrigation from surface wells by means of submerged perforated tiling; plan proposed is to lay concrete tiling at regular intervals at from 8 to 15 inches under ground and supply every 10 acres with well, which will feed perforated tiles, and from these the soil will draw required moisture.

Louisville, Ky.—Underpass.—Bids will be opened May 24 for construction of underpass or undergrade crossing in Oak street between 8th and 10th streets, to be built by city and Louisville & Nashville Railroad; work will consist of 20,000 cubic yards of excavation, 2300 cubic yards plain and reinforced concrete, etc.; Alex. G. Barret, chairman Board of Public Works. (See "Machinery Wanted.")

Miami, Fla.—Slips.—James P. McQuade will construct slips for accommodation of ships. (See "Ice and Cold-storage Plants.")

Pecan Island, La.—Canal.—Residents will build by private subscription proposed canal from cotton gin on Pecan Island to White Lake; canal 22 feet wide, five feet deep and about one and three-quarter miles long; A. K. Ramsey, secretary Gueydan Business League, Gueydan, La., can probably give information.

Roland Park, Station L, Baltimore, Md.—Wall.—Roland Park Co., Edward H. Bouton, president, 408 Roland Ave., will construct garden wall at embankment along University Parkway; concrete and brick; 661 feet long; cost \$2500.

Texas City, Texas—Pier.—The Texas City Company, A. B. Wolvin, president, Duluth,

Minn., has awarded contract for enlarging pier. (See "Warehouses.")

MISCELLANEOUS ENTERPRISES

Alpine, Texas—Laundry.—Alpine Steam Laundry, A. E. Worley, manager, will establish proposed laundry; will erect buildings 30x80 feet, to cost \$1200; cost of machinery \$1800.

Americus, Ga.—Tobacco Cultivation, etc.—Raymond Orchard Co. incorporated with \$175,000 capital stock. (See "Canning and Packing Plants.")

Asheville, N. C.—Mercantile.—Asheville Dry Goods Co. incorporated with \$50,000 capital stock by Moses Swartzberg and others.

Augusta, Ga.—Builders' Supplies.—R. J. Horne Company incorporated with \$4500 capital stock by R. J. Horne, R. G. Barinowski and W. H. Oetjen.

Baltimore, Md.—Plating.—Green & Co. incorporated with \$2500 capital stock by Walter Z. Mitchell, 208 North Holiday St.; W. Osborne Mitchell, 1219 North Calvert St., and Samuel A. Green.

Baltimore, Md.—China, Glassware, etc.—H. P. Chandler Sons Company incorporated with \$15,000 capital stock by Alexander W. Chandler, Jesse Englar, Theo. Moths and others; will continue establishment at 9-11-13 West Lombard street.

Birmingham, Ala.—Land Improvement.—Smith & Norton Realty Co. incorporated with \$12,000 capital stock; Victor H. Smith, president; E. G. Norton, vice-president; J. B. Rudolph, secretary and treasurer.

Birmingham, Ala.—Coal, Transfer, etc.—Fowikes & Myatt Coal Co. incorporated with \$4000 capital stock; M. A. Myatt, president; S. P. Fowikes, vice-president and general manager; M. J. Oliver, secretary and treasurer.

Carthage, Tenn.—Packets.—Carthage Packet Co., recently reported incorporated with \$30,000 capital stock by W. E. Myer, C. S. Fisher and others to operate steamboats on Cumberland River, has contracted with Howard Shipyard, Jefferson, Ind., for construction of steamboat 22x125 feet, three-foot hold, 100 tons capacity; will install electric-light plant in boat. (See "Machinery Wanted.")

Cashion, Okla.—Grain Elevator.—Cashion Lockridge Elevator Co. incorporated with \$10,000 capital stock by P. J. Beutler, Lockridge, Okla.; J. L. Crum and James Storm, both of Cashion.

Charlotte, N. C.—Publishing.—Christian Home Publishing Co. incorporated with \$50,000 capital stock by J. H. Ross, C. T. Teague, both of Charlotte, and J. T. Jenkins, Wilson, N. C.

Chattanooga, Tenn.—Taxicabs.—Chattanooga Taxicab Co. incorporated with \$10,000 capital stock by J. H. Buchholz, Sidney A. Webb, C. C. Nottingham and others to conduct gasoline taxicab service; may erect garage; Mr. Webb, manager.

Chickamauga, Ga.—Rock Crushing.—Hale & Bitting, 425 James Bldg., Chattanooga, Tenn., will increase capacity of rock-crushing plant at Chickamauga. (See "Machinery Wanted.")

Columbia, Tenn.—Poultry Dressing.—Will Barker & Co. will erect poultry-dressing plant; 30x60 feet; concrete floor; drainage system directly connected with city sewerage; capacity one carload daily.

Columbus, Ga.—Publishing.—Phenix-Girard Publishing Co. organized with \$3000 capital stock by C. T. Gifford, R. H. Moreland and U. H. Smith; will take over plant of Phenix-Girard Journal.

Dallas, Texas—Automobiles.—Dallas Automobile Co. incorporated with \$3000 capital stock by H. W. Evans, W. T. Pace, F. M. Gwartney and J. H. Turney.

Eagle, W. Va.—Coal Tipple.—Carver Bros., Enoch Carver, president, awarded contract for erection of rail and river coal tipple; mill construction; to be completed June 1.

Enid, Okla.—Publishing.—Advance Publishing & Supply Co. incorporated with \$10,000 capital stock by R. Cook, K. S. Jacobs, R. J. Bach and R. T. Williams.

Fort Smith, Ark.—R. C. Bollinger Music Co. incorporated with \$100,000 capital stock by R. C. Bollinger, Emma Bollinger and Clarence Bollinger.

Gravette, Ark.—Publishing.—A. C. Veach Publishing Co. incorporated with \$26,500 capital stock by A. C. Veach, F. A. Sanders, Harry Aisman and E. M. Gravette.

Houston, Texas—Land Development.—C. A. Dyer, General Delivery, Houston, is promoting development of Colonial Richland, near Houston; contemplates clearing land for fruit and trucking purposes, and will install sawmill.

Jacksonville, Fla.—Land Improvement.—Bunnell Development Co. incorporated with \$100,000 capital stock; I. I. Moody, president; Claude E. Stewart, vice-president; J. F. Lambert, secretary and treasurer.

Jacksonville, Fla.—Crematory.—City awarded contract to Dixon Engineering Co., Toledo, Ohio, for erection of crematory previously mentioned; cost \$50,000.

Lake Charles, La.—Cattle and Market.—Calcasieu-Cameron Cattle & Market Co. incorporated with \$10,000 capital stock by John Senac, Sidney Debarge, S. R. Walker and others.

Louisville, Ky.—Glossbronner Commercial Car Co. incorporated with \$10,000 capital stock by J. E. Glossbronner, J. C. Glossbronner and Charles F. Taylor.

Memphis, Tenn.—Land Development.—Company will be incorporated with \$50,000 capital stock by W. R. Barksdale, T. L. Webb, Henry Livingston and others to develop 72 acres of land near Binghamton.

Memphis, Tenn.—Mill Supplies, etc.—Central Hardware Co. incorporated with \$30,000 capital stock by H. R. Miller, W. E. Barnes, R. L. Crofton and others.

Miami, Okla.—Bigham Implement Co. incorporated with \$5000 capital stock by G. W. Bigham, Peter McCullough, Elmer J. Bigham and others.

New Orleans, La.—Mineral Water.—Carizzo Springs Co. incorporated with \$5000 capital stock; Emilie Perrin, president.

New Orleans, La.—Upholstering.—Shilling Mercantile & Furniture Co. incorporated with \$25,000 capital stock to conduct furniture upholstering business, etc.; Samuel Shilling, president and secretary; Mrs. T. Shilling, vice-president; Miss Rai Shilling, treasurer; will erect building; plans not decided; address until July 15, Alexandria, La. (See "Machinery Wanted.")

New Orleans, La.—Fire-alarm Extension.—City contemplates extension of fire-alarm service, including removal of fire-alarm office from roof of city hall to new city hall annex, installation of 30 additional signal boxes, placing of main cable under ground and general reconstruction; cost \$20,000; Foster Olroyd, 516 Pelican Ave., City Electrician and Superintendent of Fire Alarm.

Oklahoma City, Okla.—Engineering.—Southwestern Engineering Co. incorporated with \$10,000 capital stock by M. H. McCarver, J. B. Davidson and A. C. Root.

Paducah, Ky.—Land Improvement.—Plainview Land Co. incorporated with \$750 capital stock by J. L. Friedman, J. W. Keller, George H. Goodman and others.

Parkersburg, W. Va.—Publishing.—Parkersburg Publishing Co. incorporated by Reese Blizzard, C. H. Shattuck, C. B. Kefauver and others.

Parkersburg, W. Va.—Publishing.—Parkersburg Publishing Co. incorporated with \$50,000 capital stock by C. H. Shattuck, Reese Blizzard, C. B. Kefauver and others; will take over plant of Dispatch-News.

Putnam, Texas—Mineral Water.—Putnam Mineral Water & Development Co., Putnam and Weatherford, Texas, recently noted incorporated with \$30,000 capital stock, will erect 60x100-foot three story building; ordinary construction; cost \$25,000; will open machinery proposals in 60 days; W. D. Carter, Weatherford, Texas, president; G. A. Holland, same address, vice-president; B. L. Russell, Baird, Texas, treasurer; J. H. Surles, business manager, Putnam.

Ravenswood, W. Va.—Hardware, etc.—John A. McIntosh & Son incorporated with \$25,000 capital stock by C. L. McIntosh, Virginia McIntosh, D. C. McIntosh and others.

Richmond, Va.—Coal Agency.—L. G. Crenshaw & Co. incorporated with \$45,000 capital stock; L. G. Crenshaw, president; W. D. Browning, vice-president; A. L. Mattern, secretary and treasurer.

Richmond, Va.—Dairy.—Clyde W. Saunders and A. T. Griffith have purchased Ace Stock Farm; will drain and develop the soil and establish dairy; will install sterilizing apparatus.

Richmond, Va.—Publishing.—Evans Press incorporated with Edward S. Evans, president, B. A. Rufin vice-president and secretary, E. N. Newman treasurer.

Richmond, Va.—Electrical Supplies.—Electric Supply Co. incorporated with \$10,000 capital stock; F. J. Whybrew, president; J. C. Herbert, vice-president; R. A. Paine, secretary and treasurer; electric supply and contracting.

Richwood, W. Va.—Publishing.—Nicholas News Co. incorporated with \$5000 capital stock by John H. Landacre, L. H. Odell, M. L. Brock and others.

Rome, Ga.—Automobiles.—Rome Garage Co.

incorporated with \$6000 capital stock by R. M. Hoy, F. Hanson and B. C. Harbour.

San Antonio, Texas—Laundry.—Mission City Laundry Co., 228 South Flores St., recently noted incorporated by R. S. Pardue and others, will establish laundry; will erect 150x70-foot brick metal-roof building; A. E. Lowe, Box 80, San Antonio, is member of company. (See "Machinery Wanted.")

San Antonio, Texas—Irrigable Lands.—Texas Land Corporation, recently reported incorporated, has organized with \$20,000 capital stock; Van A. Webster, president; H. B. Andrews, vice-president; Robert Maverick, secretary and treasurer; office, 118½ West Commerce St.

Spray, N. C.—Motor Cars.—Spray-Reidsville Motor Co. incorporated with \$25,000 capital stock by H. L. Hopkins, J. E. Carrington and T. S. Beall, all of Greensboro, N. C.

St. Louis, Mo.—Furniture, etc.—Kluge Furniture Co. incorporated with \$10,000 capital stock by Gottlob K. Kluge, John Preuser and Fred Gruene.

St. Louis, Mo.—Automatic Shoe Shining.—Westmoreland Automatic Shoe Cleaning Machine Co. incorporated with \$100,000 capital stock by Harry Fieldberg, Francis J. Callahan, Harry A. Frank and others.

Sulphur Springs, Ark.—Mineral Water.—Sulphur Springs Mineral Water Co. incorporated with \$25,000 capital stock by John Morris Griffin, Emma R. Griffin, W. L. Stephen and Oscar Kilhberg.

Tampa, Fla.—Cleaning and Laundering.—The Troy organized with C. H. Travers manager; will establish laundry and cleaning plant; vacuum process of cleaning; electrical motive power; will install 40-horsepower boiler.

Tampa, Fla.—Land Improvement.—Southern Lands Investment Co. incorporated with \$10,000 capital stock; George W. Bean, president and treasurer; Walter P. Corbett, vice-president; Chapman H. Tedder, general manager and secretary.

Texas City, Texas—Grain Elevators.—The Texas City Company, A. B. Wolvin, president, Duluth, Minn., proposes to build grain elevator; steel and tile construction; circular the storage tanks; house with capacity of 500,000 bushels and storage tanks for 500,000 bushels. (See "Warehouses.")

Tulsa, Okla.—Municipal Improvements.—City has voted \$20,000 of bonds for fire equipment and \$25,000 of bonds for park improvements. Address The Mayor.

Washington, D. C.—Land Improvement.—Seminole Land & Investment Co. incorporated with \$950,000 capital stock; E. H. Thomas, Columbian Bldg., president; John McElroy, 1412 16th St. N. W., vice-president; D. L. Rice, 519 13th St. N. W., secretary and treasurer.

Washington, D. C.—Stationery.—Swett Stationery Co. incorporated with \$25,000 capital stock; C. P. Swett, president, 913 F St. N. W.; B. F. Hand, vice-president; D. E. Beckwith, secretary and treasurer, 704 Quincy St. N. W.

Wayne, N. C.—Land Improvement.—Home Land & Investment Co. incorporated with \$5000 capital stock by O. E. Walker, Eustace Atkins, L. B. Hardwick and others.

Wichita Falls, Texas—Land Improvement.—Floral Heights Realty Co. incorporated with \$125,000 capital stock by J. A. Kemp, Frank Bell, A. H. Carrigan and John T. Young.

Wilmington, N. C.—Publishing.—Company incorporated with \$100,000 capital stock; William E. Springer, president; J. E. Thompson, manager; D. C. Love, secretary and treasurer; will take over and improve plant of the Morning Star.

Wytheville, Va.—Steam Laundry.—G. S. Sexton contemplates establishing steam laundry. (See "Machinery Wanted.")

MISCELLANEOUS MANUFACTURING PLANTS

Atlanta, Ga.—Morris & Co., Chicago, Ill., will establish fertilizer plant; operated by electricity; cost \$200,000; Peter S. Gilchrist, Charlotte, N. C., chemical and constructing engineer in charge; Solomon-Norcross Company, Atlanta, associate engineer; John W. Robinson, Southern manager; Atlanta office, Empire Bldg. (Noted in February.)

Baltimore, Md.—Gardiner Dairy Co., 524 North Calvert St., will not erect ice-cream plant on site already purchased.

Beeville, Texas—Gas Plant.—Cleveland (Ohio) firm applied for 50-year franchise to install gas plant at Beeville. Address Mayor Beasley.

Caldwell, Texas—Creamery.—R. S. Bowers is promoting establishment of creamery.

Cedartown, Ga.—Creamery, Polk County Creamery incorporated with \$3000 capital

stock by J. S. King, R. H. Jones, W. H. Wright and others.

Childress, Texas—Brooms.—Company organized to establish plant for manufacturing brooms; W. T. McNulty, secretary Board of Trade, can give information. (See "Machinery Wanted.")

Dallas, Texas—Gas.—Dallas Gas Co. awarded contract to United Gas & Improvement Co., Philadelphia, Pa., for water-gas machine with capacity of 1,000,000 cubic feet daily; will more than double capacity.

Denison, Texas—Peanut Factory.—Texas Nut Co., W. H. Kelly, care of Kelly Company, Cleveland, Ohio, president, contemplates erection and equipment of peanut factory; capacity, two cars daily.

Durham, N. C.—Vehicles and Harness.—Durham Vehicle & Harness Co. incorporated with \$25,000 capital stock by C. P. & C. C. Hawerton.

Elizabeth, W. Va.—Medicine.—Kanawha Veterinary Remedy Co. incorporated by E. B. Harper, F. W. Reese, L. W. Cain and others.

El Reno, Okla.—Granite Works.—Apache Granite Co., Granite, Okla., will, it is reported, establish plant at El Reno.

Fairmont, W. Va.—Gloves.—B. M. Musgrave, Clarksburg, W. Va., and J. F. Bradford, Middlebourne, W. Va., will establish plant for manufacturing gloves and mittens.

Franklin, N. C.—Micra Boards, etc.—Company organized with \$100,000 capital stock by A. L. Roberts, Watertown, N. Y.; J. B. Fairburn, Colonel Holbrook, both of Syracuse, N. Y., and others; will establish plant in Franklin for manufacturing micra boards, built-up plates of micra, washer, spark plugs, etc., using scrap micra.

Hagerstown, Md.—Garments.—Hagerstown Garment Co. incorporated with \$5000 capital stock by J. F. Roessner, C. Harry Keller, A. F. Rothstein and others; purchased machinery of Phoenix Manufacturing Co.; will install new machinery, including 10-horsepower motor, and establish plant for manufacturing men's shirts, etc.

Little Rock, Ark.—Mattresses.—J. R. Vinson awarded contract to George W. Farmer, Little Rock, for erection of factory building for Joppa Mattress Co., recently noted; three stories; brick; 50x140 feet; mill construction; automatic sprinkler; will install felt and comfort manufacturing machinery; manufacture felt mattresses, cotton battening and comforts; plans by Gibbs & Sanders, Little Rock; cost \$18,000. (See "Machinery Wanted.")

Louisville, Ky.—Jacks and Pumps.—Pneumatic Jack Co. incorporated with \$100,000 capital stock by L. J. Dittmar, R. S. Brown and Elliott K. Pennybaker.

Medford, Okla.—Drugs.—Grant County Drug Co. incorporated with \$10,000 capital stock by T. L. Neal, Medford; B. W. Stafford and E. N. Stafford, both of Manchester, Okla.

Memphis, Tenn.—Roofing, etc.—Memphis Roofing & Manufacturing Co. incorporated with \$10,000 capital stock by M. S. Miller, L. C. Cato, M. F. Low and others.

Memphis, Tenn.—Handkerchiefs.—Fish Handkerchief Co. incorporated with \$20,000 capital stock by J. T. Leake, Memphis, and Alexander Fish, Nashville, Tenn.; will establish handkerchief factory with capacity of 500 dozen daily.

Mobile, Ala.—Paint.—Reeves Lone Star Paint Co. incorporated with \$25,000 capital stock; J. W. Reeves, president; W. O. Lott, vice-president; Richard A. Christian, secretary and treasurer.

Montgomery, Ala.—Ice-cream.—Montgomery Ice Cream, Dairy & Trading Co., W. F. Bryant, secretary, recently reported incorporated, will erect two-story brick structure, 60x120 feet, to cost \$20,000; will install ice-cream machinery of 40 quarts capacity; refrigerating machinery purchased. (See "Machinery Wanted.")

Nashville, Tenn.—Mattresses and Springs.—Jamison Spring & Mattress Co. incorporated with \$10,000 capital stock by H. D. and R. D. Jamison, J. S. Hopkins and others.

Portsmouth, Va.—Portsmouth Gas Co. will expend \$8000 for extension of gas mains.

Rocky Mount, N. C.—Candy.—Thomas Candy Co. incorporated with \$10,000 capital stock by Zachariah Thomas, John Thomas and Gus Mahulias.

Shreveport, La.—Glass.—George W. Stough, Mount Valley, Kans., contemplates establishing of glass plant in Shreveport.

St. Louis, Mo.—Soap and Toilet Articles.—Mazo Soap & Manufacturing Co. incorporated by M. J. Pope, D. M. Stearns and R. C. Wacker.

St. Louis, Mo.—Trueblood-Peebles Manufacturing Co. incorporated with \$10,000 capital

stock by Wilson D. Trueblood, Frank W. L. Peebles, Alva C. Trueblood and others.

St. Louis, Mo.—Automobiles.—Cook Motor Vehicle Co. incorporated with \$10,000 capital stock by Oscar H. Cook, Nanna Cook and Jerome J. Cook.

Tampa, Fla.—Cigars.—Y. Pendas & Alvarez awarded contract at \$42,950 to Levick & Mobley, Tampa, for erection of proposed cigar factory. (Mentioned in March.)

Thomasville, N. C.—Picker Sticks.—Thomasville Picker Stick Co. will double capital stock and output of plant.

Toccoa, Ga.—Drugs.—People's Drug Co. incorporated with \$3500 capital stock by J. R. McLaughlin, E. H. Graves, J. B. Simmons and others.

Troy, Ala.—Chemicals and Oil.—Standard Chemical & Oil Co. awarded contract to Fox Henderson, Troy, for erection of seedhouse, office and electric-light plant, to replace burned structures.

Tulsa, Okla.—Glass.—Cherryvale Glass Co., Cherryvale, Kans., will establish "Tulsa Glass Co." plant recently noted; to cost \$30,000; will erect corrugated-iron and frame structures; manufacture lamp chimneys and hollow glassware.

Washington, D. C.—Fiber Mills.—Washington Industrial Co., Capt. B. F. Hand, president and manager, 111 McGill Bldg., 900 C St. N. W., Washington, D. C., contemplates establishment of fiber mills in Southern States. (Reported incorporated in March.)

Wheeling, W. Va.—Tin Boxes, Tubes, etc.—Wheeling Stamping Co. awarded contracts for machinery and lithographing outfit to be installed in department for manufacturing tin boxes and collapsible tubes.

Yazoo City, Miss.—Gas Plant.—C. M. Moran applied for franchise to erect gas plant.

RAILWAY SHOPS, TERMINALS, ROUNDHOUSES, ETC.

Calvin, Okla.—Missouri, Oklahoma & Gulf Railway, E. J. Noonan, chief engineer, Calvin, will construct depots, section-house groups and miscellaneous structures on about 100 miles of southern extension between Calvin and Durant, and on operated line between Calvin and Muskogee. Bids opened May 1.

Coster, Station Knoxville, Tenn.—Southern Railway awarded contract to David Getaz, Son & Co. of Knoxville for boiler shop at Coster; structure to be two stories; steel frame; brick; 100x322 feet; glass encased; steel tower 50 feet high; foundation work to be done by Contractor Gather of Coster shops; D. W. Lum, chief engineer maintenance of way and structures, Washington, D. C., will be in charge; cost \$60,000. (Recently mentioned.)

Dallas, Texas.—Chicago, Rock Island & Gulf Railway, C. M. Case, chief engineer, Fort Worth, Texas, and St. Louis & San Francisco Railroad, M. C. Byers, chief engineer, St. Louis, Mo., contemplate beginning within 30 days proposed improvement of freight terminals in Dallas, which will involve expenditure of between \$500,000 and \$600,000; betterments will include trackage and switch facilities, yard, roundhouse and freight depot; if arrangements can be made with Gulf, Colorado & Santa Fe Railway, two freight depots will be built. (Previously mentioned.)

Fort Worth, Texas.—Texas & Pacific Railway, B. S. Wathen, chief engineer, Dallas, Texas, contracted with Fairbanks-Morse Co. of Fort Worth for construction of coaling station at Fort Worth; capacity 500 tons of coal, 100 yards of wet sand and 15 yards of dry sand; two delivery pockets; reported cost \$30,000.

ROAD AND STREET IMPROVEMENTS

Augusta, Ga.—Carolina Heights Boulevard Association, W. H. Brigham, president, 934 Walker St., will receive bids until May 10 for construction of proposed Carolina Heights Boulevard, to extend from Centre-street bridge to Summer Hill, distance of three miles; will be constructed of sand and gravel and cost \$5000. (See "Machinery Wanted.")

Bessemer, Ala.—Board of Revenue awarded contract to Thomas Wright of Bessemer at \$4000 for completion of Fourteenth-avenue road.

Bethesda, Md.—Bethesda District will vote May 17 on issuance of \$25,000 of bonds for road improvements. Address Montgomery County Commissioners, Rockville, Md.

Birmingham, Ala.—C. P. Parson of Birmingham has contract at \$250.21 to construct South Park road, distance of one and seven-tenths miles.

Chester, S. C.—City will make slight street

improvements; work to be done by city force; recently noted. (See "Water-Works.")

Crowley, La.—City will lay concrete sidewalks in residence section. Address The Mayor

Cumberland, Md.—City Council passed ordinances providing for paving Fayette street with vitrified brick and for paving and re-curbing of Bedford street. Address The Mayor

Galveston, Texas.—Kelsi & Vautrin of Galveston have contract at \$26,452.85 for paving seawall boulevard from 22d street east six blocks to 16th street with Coffeeville (Kans.) block, and at \$1875 for seawall railing; contract for concrete curbing and sidewalk not awarded; John M. Murch, County Auditor. (Recently mentioned.)

Georgetown, Ky.—Scott county will grade and macadamize Craig road, being about one and one-half miles long; bids to be opened May 15; J. W. Duncan, president, and John F. Wayts, secretary, Road Committee. (See "Machinery Wanted.")

Greeneville, Tenn.—Greene county awarded contracts to J. A. Noell and W. M. Stokes, both of Greeneville, for construction of 25 miles of road; price, 17 cents for dirt and 65 cents for rock.

Grieff, Ga.—City voted bond issue of \$25,000 for street paving, for which \$75,000 will be available. Address The Mayor. (Bond issue recently noted.)

Johnson City, Tenn.—S. C. Williams, J. A. Summers, Isaac Hart and others contemplate organizing company to construct macadam road from Johnson City to Free Hill, distance of 12 miles.

Lockhart, Texas.—Caldwell county voted \$50,000 bond issue for road improvements in Precinct No. 1. Address County Commissioners. (Recently mentioned.)

Marshall, N. C.—City will have plans prepared by Dudley Chipley, secretary and engineer Board of Internal Improvements, for street improvements recently noted; \$25,000 available for street improvements, sewerage system and completion of water-works.

McAlester, Okla.—City will construct vitrified-block pavement, cement curb and gutter; estimated cost, \$78,458.90; J. M. Gannaway, City Clerk; J. Phelan, City Engineer. (See "Machinery Wanted.")

McKinney, Texas.—City will vote May 31 on issuance of \$20,000 of bonds for street improvement and erection of fire station. Address The Mayor.

Memphis, Tenn.—City will issue \$1,000,000 of bonds for street improvement, \$425,000 being allotted to present administration and \$575,000 to next; bill provides that overdraft in department of streets, bridges and sewers be paid off first; James H. Malone, Mayor.

Moultrie, Ga.—City voted \$7000 of bonds for street improvements. Address The Mayor. (Recently mentioned.)

New Orleans, La.—Finance Committee rejected all bids for paving of Carrollton avenue; City Attorney and W. J. Hardee, City Engineer, were authorized to prepare new ordinance and specifications; total of four miles is to be paved; bids received aggregated \$592,746. (Recently mentioned.)

Newport, Tenn.—Cocke county is having surveys made by Hugh Crozer, engineer of Newport, for road improvements, for which \$200,000 bond issue has been authorized; B. W. Hooper, secretary Pike Commissioners. (Mentioned in March.)

Park, Station Knoxville, Tenn.—City awarded contract to Little & McBee for grading Linden avenue and Lawson street, and to Lawson Irwin for grading Ivy and Summer streets; this is preparatory to macadamizing, contracts for which were recently reported awarded; \$62,500 of bonds have been issued; W. H. Underwood, chairman Street Committee.

Pensacola, Fla.—City will grade, pave and curb certain streets; bids to be opened June 1; R. M. Bushnell, chairman Board of Bond Trustees. (See "Machinery Wanted.")

Sanford, Fla.—City awarded contract to Georgia Engineering Co., Augusta, Ga., to pave Sanford avenue, 10th street, Park avenue and other streets.

Tulsa, Okla.—City will construct four miles of asphalt paving to cost \$250,000; T. C. Hughes, City Engineer.

Washington, D. C.—Bids will be opened May 15 for laying asphalt-block pavements, also for paving various streets with sheet asphalt; Henry B. F. Macfarland, Henry L. West and William V. Judson, Commissioners D. C. (See "Machinery Wanted.")

Waycross, Ga.—Ware county is considering issuance of \$200,000 of bonds for road improvements, etc. Address County Commissioners.

SEWER CONSTRUCTION

Alpine, Texas.—Alpine Power Co., incorporated by H. W. Townsend and others, contemplates constructing sewer system. (See "Electric-light and Power Plants.")

Chester, S. C.—City will extend sewer system. Address The Mayor. (See "Water-Works.")

Clarendon, Ark.—City will soon invite bids for construction of sewer system. Address The Mayor. (See "Water-Works.")

Cleveland, Tenn.—City will consider issuance of \$35,000 of bonds for sewer construction. Address The Mayor.

Fort Sam Houston, Texas.—Bids will be opened May 12 for extension of water distributing, sewerage and drainage systems for additions to post hospital. Tilman Campbell, constructing quartermaster. (See "Machinery Wanted.")

Greensboro, N. C.—North Carolina Sanatorium for Treatment of Tuberculosis will construct sewer system. (See "Electric-Light and Power Plants.")

Lawton, Okla.—City voted \$125,000 of bonds for extension of sewer system. J. D. Kanord, City Engineer. (See "Water-Works.")

Lexington, Miss.—City selected Xavier A. Kramer, Magnolia, Miss., to make surveys and estimates for sewer system and water-works.

Louisville, Ky.—City will open bids May 21 for construction of section "A" of northeastern trunk sewer and section "A" of Beargrass drain improvement, contract No. 36 of comprehensive system of sewerage; W. C. Nones, chairman Sewerage Commissioners, Equitable Bldg.; Harrison P. Eddy, consulting engineer, 14 Beacon St., Boston, Mass. (See "Machinery Wanted.")

Louisville, Ky.—City will open bids May 7 for construction of 16th-street sewer, contract No. 37 of comprehensive system of sewerage; work will consist of building 1250 feet of concrete sewer 27 to 39 inches in diameter, and including 260 cubic yards of concrete; W. C. Nones, chairman Sewerage Commissioners, Equitable Bldg. (See "Machinery Wanted.")

Marshall, N. C.—City will have plans prepared by Dudley Chipley, secretary and engineer Board of Internal Improvements, for installation of sewerage system recently mentioned. (See "Road and Street Improvements.")

Moultrie, Ga.—City voted \$19,000 of bonds for sanitary sewer construction; H. S. Jaudon, engineer, Savannah, Ga., prepared plans. (Recently mentioned.)

Oklahoma City, Okla.—City awarded contract to Derr & Wiles of Oklahoma City for construction of sewers in Neas avenue and Belle Vera addition, and in Cream Ridge addition.

Quincy, Fla.—City voted bond issue of \$25,000 for sewerage system; Herbert A. Love, Mayor. (Recently noted.)

San Antonio, Texas.—Beacon Hill district contemplates issuance of \$17,000 of bonds for addition to sewer system; mainly eight-inch lines; A. C. Pancoast, assistant city engineer. (Recently noted to contemplate \$5000 bond issue.)

Texas City, Texas.—The Texas City Company, A. B. Wolvin, president, Duluth, Minn., will construct sewerage system for townsite; 26-inch pipe for trunk line. (See "Warehouses.")

Tulsa, Okla.—City voted \$65,000 sewer bonds; T. C. Hughes, City Engineer.

TELEPHONE SYSTEMS

Castalian Springs, Tenn.—Castalian Springs Home Telephone Co. incorporated by J. H. Shoulders, J. C. Corum and T. S. Corum.

Cedar, Okla.—Orchard Center Telephone Co. incorporated by William H. Thorn, Jos. Charviz, Charles S. Choate and others.

Clover, Va.—Staunton River Telephone Co. incorporated with \$10,000 capital stock; W. H. Dorin, president, Mt. Laurel, Va.; J. T. Lacy, vice-president, Scottsburg, Va.; R. H. Fuller, general manager; W. S. Adkisson, secretary; G. B. Gibson, treasurer; contemplates construction of 200 miles additional line, to Houston and other cities; has completed about 100 miles metallic telephone line in Halifax county, with terminals at South Boston, Clover, Scottsburg and Lennig, and central at Mt. Laurel, Va.

Denton, Texas.—Southwestern Telephone & Telegraph Co., main office, Houston, Texas, will, it is reported, expend several thousand dollars for rebuilding and extending system at Denton.

Dinwiddie, Va.—Dinwiddie Telephone Co. will increase capital stock to \$25,000 and make improvements to system.

Emporia, Va.—Home Telephone & Telegraph Co., J. P. Taylor, president, Henderson, N. C., will establish telephone system at Emporia; cable distribution; central energy; cost of construction, \$15,000.

Hilham, Tenn.—Hilham & Livingston Branch of Home Telephone System, recently noted incorporated (under Livingston, Tenn.), will establish headquarters and main office at Hilham; W. A. Ormsby, president; W. D. Fiske, secretary; M. H. Wells, general manager. (See "Machinery Wanted.")

Hinesville, Ga.—Liberty County Telephone Co. organized by J. R. Ryon, E. C. Miller, S. B. Brewton and others; will construct line from Hinesville to McIntosh, Ga.

Ivygap, Miss.—Ivygap Telephone Co. incorporated with \$4000 capital stock by J. H. Davidson, E. S. Jackson, N. A. Roberts and others.

League City, Texas.—League City Telephone Co. will be name of company recently noted to be organized by J. E. Walker; will establish telephone system in League City and extend to three or four nearby towns; G. W. Butter, president; J. E. Walker, vice-president and manager; O. V. King, secretary; Jno. P. Atkinson, treasurer.

Nashville, Tenn.—Cumberland Telephone & Telegraph Co., main office, Nashville, Tenn., recently noted as planning extension of system to Jackson, Miss., will erect exchange building at New Orleans; two stories; brick; composition roof; 60x120 feet; plans by company's draughtsman; estimates being taken on masonry only.

Snyder, Texas.—Scurry County Telephone Co., organized with R. N. Miller president, George T. Curtis vice-president and general manager, has purchased telephone exchange of Texas & Pacific Company and will make improvements.

Springfield, Ga.—Effingham Telephone Co. incorporated with \$5000 capital stock to take over and extend telephone line now in operation between Guyton, Pineora and Tuscumbia, Ga.

St. Matthews, S. C.—Creston Telephone Co. organized with R. D. Layton president, J. M. Holmon secretary and treasurer; will operate telephone system between Creston and St. Matthews.

Travellers Rest, S. C.—Travellers Rest Telephone Co. incorporated by J. H. Roe, J. R. Anderson and Rex Lanford.

Tulsa, Okla.—Pioneer Telephone Co. contemplates erection of four-story building, placing wires under ground and installation of \$75,000 switchboard.

Whitehorse, Okla.—Whitehorse Rural Telephone Co. incorporated by W. C. Douglas, M. E. Smith, L. D. Romig and others.

TEXTILE MILLS

Anniston, Ala.—Cordage.—Anniston Cordage Co. will not enlarge plant; recent report not correct.

Bladenboro, N. C.—Bridger Bros. are understood to be promoting establishment of cotton mill.

Chickasha, Okla.—Knit Goods.—Chickasha Commercial Club is considering proposition of L. M. Potts to establish knitting mill; investment of \$150,000 reported as contemplated.

Durham, N. C.—Sheetings.—Erwin Cotton Mills buildings will be one story high, of brick construction; spinning-room, 518x200 feet; weave shed, 307x300 feet; picker-house, 87x92 feet; approximate cost, \$200,000; contract lately noted awarded to Fiske-Carter Construction Co., Worcester, Mass.; textile machinery will include 50,000 spindles and 1500 looms.

Forest City, N. C.—Hosiery.—Company organized to build hosiery mill; will install 10 knitting machines and gasoline engine; G. P. Reid, president; Cyrus Wilkie, secretary; W. W. Hicks, treasurer.

Gaffney, S. C.—Chain Warps, etc.—Globe Manufacturing Co. will increase capital stock from \$75,000 to \$200,000 and build addition; present equipment, 4000 ring spindles.

Greensboro, Ga.—Sheetings.—Mary-Lella Cotton Mill contemplates increasing capacity; present equipment, 6120 ring spindles, 180 looms, etc.

Hendersonville, N. C.—Green River Power Co., W. A. Mauney, president, Kings Mountain, N. C., will build cotton mill; will build

water-power-electric plant to furnish electricity for this mill and other industries.

Hillsboro, N. C.—Ginghams.—Belle-Vue Manufacturing Co. will erect one-story weaveroom, 75x100 feet, and install 200 looms; awarded building contract to J. D. McAdams, Elon, N. C., and machinery contract to Crompton & Knowles Loom Works, Worcester, Mass.

Huntsville, Ala.—Underwear.—Huntsville Knitting Co. will, it is rumored, double capacity of mill; now operates 600 spindles, 38 knitting machines, etc.

Macon, Ga.—Hosiery.—Central City Hosiery Manufacturing Co. incorporated with capital stock of \$10,000, and privilege of increasing to \$100,000, by D. L. Thomas, G. R. Rankin, H. J. Moody and J. T. Hall; will install machinery to knit 300 dozen pairs hose daily.

Marion, N. C.—Sheetings.—Marion Manufacturing Co., recently reported organized, etc., awarded contract at about \$70,000 to Ebaugh & Ebaugh, Greenville, S. C., for construction of mill buildings; will install 12,500 ring spindles, 300 looms, etc., for manufacturing brown sheetings; company capitalized at \$250,000, and D. D. Little, Spartanburg, S. C., will be president.

Merrimac, Texas—Artificial Silk, etc.—Merrimac Mercantile & Manufacturing Co. will establish plant for manufacturing artificial silk and horsehair.

Montgomery, Ala.—Sheetings, etc.—Montana Manufacturing Co. incorporated with capital stock of \$250,000 to acquire People's Cotton Factory; 10,000 ring spindles, 320 looms, etc.; Thos. Barrett, Jr., Augusta, Ga., president; F. H. Barrett, Augusta, vice-president; M. L. Grell, Montgomery, secretary.

Penrose, N. C.—Cotton Yarns.—Penrose Manufacturing Co. incorporated with capital stock of \$125,000 by H. P. Moore, John H. Cox and others.

Sanford, N. C.—Knit Goods.—W. A. Ellington of Chapel Hill, N. C., reported as to establish knitting mill.

WATER-WORKS

Alpine, Texas.—Alpine Power Co., incorporated by H. W. Townsend and others, will construct water-works. (See "Electric-light and Power Plants.")

Beaufort, S. C.—City has disposed of \$43,000 bond issue for construction of water-works, electric-light-plant and town hall. Address The Mayor.

Brooksville, Miss.—City awarded contract to Walter V. O'Rourke, 614 Machea Bldg., New Orleans, La., for construction of water-works at Brooksville.

Chester, S. C.—City will install new filter plant; probable cost, \$18,000; will also extend water mains. Address The Mayor. (Recently noted to vote May 4 on \$26,000 bond issue for water-works and street improvements.)

Clarendon, Ark.—City will soon invite bids for construction of proposed water and sewer systems; probably two wells will be bored; estimated cost, between \$80,000 and \$100,000. Address The Mayor.

Crockett, Texas.—City is having surveys made by John W. Maxcy Engineering Co., Houston, Texas, preliminary to construction of water-works.

Elgin, Texas.—City awarded contract to J. S. Harwick of Elgin for erection of power-house at Carr Springs for city water-works; J. W. Maxcy Company, Binz Bldg., Houston, Texas, are engineers in charge; piping will include 19,000 feet of eight-inch, 2300 feet of six-inch and 5000 feet of four-inch, with hydrants and valves. (Mentioned in March.)

El Paso, Texas.—City will install filtration plant. Address The Mayor.

Fort Sam Houston, Texas.—Bids will be opened May 12 for extension of water-distributing, sewerage and drainage systems for additions to post hospital. Tilman Campbell, constructing quartermaster. (See "Machinery Wanted.")

Hampton, Ga.—City will vote May 10 on issuance of \$20,000 of water-works and electric-light bonds. Address The Mayor.

Hamlin, Texas.—City opened bids May 6 for tank and tower, pumps and engine, pipe, plugs, etc., for proposed water-works; W. T. Shannon, Mayor.

Hanover, Va.—Town Council has drafted franchises for water and electric-light companies which will soon be offered. Address Town Clerk.

Knoxville, Tenn.—Knoxville Water Co. proposes to extend eight-inch water main from Kingston pike and 12th street to 15th street, and from there lay six-inch main, distance of two miles, etc.

Krebs, Okla.—City will vote May 15 on is-

sance of \$50,000 of bonds for water-works. Address The Mayor.

Lawton, Okla.—City has voted issuance of \$125,000 of bonds for various improvements, including construction of dam across Medicine Creek to form reservoir for city's water service and extensions to present water mains; also for extension of storm-water system and draining of Squaw Creek, making 480-acre addition to city; J. D. Kanord, City Engineer. (Recently mentioned.)

Lexington, Miss.—City has selected Xavier A. Kramer, Magnolia, Miss., to make surveys and estimates for water-works and sewer system.

Louisville, Ky.—Water Board will soon invite bids for coagulant basin to contain 12,000,000 gallons of water; cost between \$100,000 and \$150,000.

Marshall, N. C.—Dudley Chipley, secretary and engineer Board of Internal Improvements, will make plans for completion of water-works system recently mentioned. (See "Road and Street Improvements.")

McAlester, Okla.—City will extend water mains; bids to be opened May 24; estimated cost, \$28,704; J. M. Gannaway, City Clerk; J. Phelan, City Engineer. (See "Machinery Wanted.")

Moultrie, Ga.—City has voted \$24,000 of bonds for extension of water-works; H. S. Jaudon, engineer, Savannah, Ga., prepared plans. (Recently mentioned.)

Murphy, N. C.—City awarded contract to Abe & Kelly, Asheville, N. C., for construction of water-works; gravity system; cost \$30,000; John B. Rider, civil engineer, Louisville, Ky., made survey. (Recently mentioned.)

Quincy, Fla.—City voted \$36,000 bond issue for water-works improvements and extension; B. A. Puckett, superintendent water and light plant; Herbert A. Love, Mayor. (Recently noted.)

Texas City, Texas.—The Texas City Co., A. B. Wolvin, president, Duluth, Minn., will construct water-works system, to include elevated tank of 100,000 gallons capacity and pumping station at terminal depot shops; will drill two additional artesian wells. (See "Warehouses.")

Tulsa, Okla.—City voted \$20,000 water-works bonds; T. C. Hughes, City Engineer.

Winona Cliffs (not a postoffice), Md.—Moran McL. Dukehart, 413 Continental Bldg., Baltimore, Md., recently mentioned as having contract to construct water and filtration plant for Winona Cliffs, has contracted for all machinery; capacity, 10,000 gallons of water daily; equipment includes filter manufactured by Lynn Filter Co., Cincinnati, Ohio; pumping machinery from Platt Iron Works Co., Dayton, Ohio, and gasoline engine from Fairbanks Company, Light and Lombard Sts., Baltimore, Md. Edward W. Coonan of Augustus Bouldin & Co., 224 St. Paul St., Baltimore, is engineer in charge.

WOODWORKING PLANTS

Asheville, N. C.—Coffins.—National Casket Co., Oneida, N. Y., awarded contract to Cummings Structural Concrete Co., Pittsburgh, Pa., for erection of plant previously noted; reinforced concrete; main building 280x180 feet; boiler and engine room 80x100 feet; drykiln 80x150 feet; it is planned to establish finishing plant later; hydraulic elevators; cost \$125,000.

Augusta, Ga.—Furniture.—Perking Manufacturing Co. will, it is reported, add manufacture of furniture to plant.

Baltimore, Md.—Furniture.—Atlantic Furniture Co., 1603 Fairmount Ave., recently reported incorporated with \$50,000 capital stock by H. T. Upfield and others, will continue Atlantic Furniture Co., manufacturer of sideboards, chamber suits, wardrobes, chiffoniers and hall racks.

Beaumont, Texas—Woodenware.—A. B. Seale will establish woodenware factory.

Beaumont, Texas.—Midway Lumber Co., Seale, La., will, it is reported, establish plant at Beaumont for manufacturing boxes, packing cases, crates, etc.

Charles Town, W. Va.—Vehicles.—Jefferson Vehicle Co. incorporated with \$5000 capital stock by C. F. Hall, George B. Goetz, M. T. Strider and others.

Charlotte, N. C.—Mantels.—Charlotte Mantel & Novelty Co., J. E. Cochran, proprietor, will establish plant for manufacturing mantels, office fixtures, etc.; will use electric power.

Clarendon, Ark.—Paint-brush Handles.—J. G. Heff will establish plant to manufacture artists' and other paint-brush handles; will erect \$1200 building; cost of plant, \$4000.

Durham, N. C.—Vehicles.—Durham Vehicle & Harness Co. incorporated with \$25,000 capi-

tal stock; W. T. Carrington, president; J. S. Carr, vice-president; W. J. Christian, secretary and treasurer; C. P. Howerton, superintendent; C. C. Howerton, assistant superintendent; will take over plant of C. P. Howerton & Son.

Fredericksburg, Va.—Vehicles.—Fredericksburg Buggy Co. incorporated with \$25,000 capital stock; J. P. Stiff, president; J. H. Biscoe, vice-president; H. C. Biscoe, secretary-treasurer.

Helena, Ark.—Chairs.—Ong Chair Co. will establish plant; will erect one-story wood building, of mill construction, with composition roof and siding, to have about 20,000 square feet space; will also build brick boiler-house and shaving vault; all materials and machinery purchased.

Huttonsville, W. Va.—Furniture, etc.—Citizens' Furniture & Undertaking Co. incorporated with \$25,000 capital stock by A. W. Zinn, G. G. Gall, W. T. W. Morgan and others.

Loudon, Tenn.—Mantels and Tables.—John J. Lutz Manufacturing Co. incorporated with \$20,000 capital stock by John J. Lutz, John P. Staub, Fritz Staub, E. H. Saunders and R. H. Sansom, all of Knoxville, Tenn.; purchased plant of Loudon Manufacturing Co. and will manufacture mantels, oak extension tables and center tables; John J. Lutz, Manager.

Memphis, Tenn.—Flooring, Screens, etc.—Chears Company incorporated with \$15,000 capital stock by H. R. Chears, T. R. Watkins, E. S. Roberts and others.

Oklahoma City, Okla.—Showcases.—Oklahoma Showcase Co. incorporated with \$25,000 capital stock by James Crane, John M. Foster and Ida A. Crane.

Portsmouth, Va.—Furniture.—Air Line Manufacturing Co. will erect addition to plant to replace burned structure, previously noted; 100x100 feet; two stories; brick; cost \$7000.

Thomaston, Ga.—Doors, Sash, etc.—Garner & Nelson have purchased plant of King Lumber Co.; will erect building and equip for manufacture of doors, sash, etc., and establish planing mill.

BURNED

Augusta, Ga.—W. H. Goodrich's residence; loss \$6000.

Belzona, Miss.—Belzona News-Enterprises' plant.

Cahcun, Tenn.—Wise & Fine's store building; McMurry & Edwards' store building; Kinsley & Howard's store building; Kinsley & Coleman's marble yard; John Gamble's blacksmith shop; total loss, \$12,500.

Courtland, Va.—Courtland Hotel; Merchants and Farmers' Bank; store buildings of E. T. Reese and Walter Bryant; total loss \$20,000.

Dallas, Texas.—Dwelling owned by R. Bedford, Tyler, Texas; loss \$3500.

Denison, Texas.—Hamilton House; loss \$10,000.

Denton, Texas.—Hamilton House; loss \$12,000.

Dublin, Ga.—Dublin Methodist Mission's parsonage; loss \$2400; Rev. J. W. Bridges, pastor.

Eagle, W. Va.—Carver Bros. Company's coal tipple; estimated loss, \$10,000.

Edgard, La.—Placide Barre's wheelwright and blacksmith shop; loss \$1200.

England, Ark.—George W. Morris' cotton gin; loss \$5000.

Hillshoro, Texas.—Opera-house owned by J. F. Bell, Fort Worth, Texas; Bratcher & Husbands, managers.

Houston, Texas.—Thomas F. Loftus' residence; loss \$6000.

Marked Tree, Ark.—Chapman & Dewey's mill building; loss \$2000.

Mobile, Ala.—John Quill's residence; loss \$60,000.

Nettleton, Ark.—F. Klech Manufacturing Co.'s heading mill; loss \$10,000.

New Orleans, La.—Building owned by John McCloskey and occupied by Importers' Coffee Co., Ltd.; loss on building, \$5000.

Norfolk, Va.—Norfolk Veneer Co.'s plant; loss \$100,000; George W. Roper, president.

Norwood, N. C.—Norwood Inn, owned by J. D. Lee; loss \$5000.

Odessa, Texas.—Buchanan Opera-house, loss \$5000; Cottage Hotel, loss \$5000; Gamel Drug Co.'s store building, loss \$5000; Thos. H. Hendrick's building, loss \$6000.

Owings Mills, Md.—Percy Smith's residence; loss on building \$10,000.

Pamplin City, Va.—State Bank of Pamplin City; postoffice; store buildings of Franklin Bros.; loss \$15,000; W. H. Lignon, \$12,000; H.

T. Terry, \$5000; L. W. Thornton, \$2000; W. B. Ford, \$2000; C. S. Mason, \$5000; J. F. Connally, \$5000; guano warehouse of Virginia-Carolina Chemical Co., main office in Richmond, Va.

Rocky Mount, N. C.—J. C. Braswell Tobacco Co.'s stemmery, prizery and warehouse.

Salisbury, N. C.—John H. Carlson's residence; E. N. Bates' upholstering factory; loss \$300,000.

Suffolk, Va.—James T. Shepherd's barn, stable and bottling plant.

Tloga, La.—Lee Lumber Co.'s plant; loss \$30,000.

Woodville, Miss.—L. T. Ventress' residence; loss \$65,000.

DAMAGED BY EXPLOSION.

New Orleans, La.—St. Louis Cathedral; loss \$10,000; Rev. Father Laval, pastor.

DAMAGED BY STORM.

Savannah, Ga.—Henderson Hull Company's buggy and wagon factory; loss \$25,000.

BUILDING NOTES

APARTMENT-HOUSES

Baltimore, Md.—Harry J. Jeffres, 6 East Lafayette Ave., awarded contract to Wm. T. Childs, 14-16 West 20th St., Baltimore, to erect apartment-house at St. Paul and Lanvale streets; four stories; 20x68 feet; semi-fireproof; hot-water heat; electric and gas lighting; cost \$12,000; plans by F. E. Beall, 213 St. Paul St., Baltimore.

Birmingham, Ala.—Mrs. Helen Harrington will erect apartment-house; two stories; brick; cost \$20,000; plans prepared.

Chatanooga, Tenn.—H. S. Probasco, care of American National Bank, 8th and Broad streets, awarded contract to J. L. Janeway, 811 Highland Park Ave., Chattanooga, for erection of two-story brick store and apartment; building recently mentioned.

Dallas, Texas.—Hewitt Construction Co. of Dallas has contract to erect apartment-house for D. W. Shanks; building to be veneered with face brick; roof of Spanish clay tile; cost \$12,000; plans by H. A. Overbeck of Dallas.

Kansas City, Mo.—C. E. Ennis will erect apartment-house; 45x56 feet; six apartments; tile floors in bathrooms; plans by Shepard & Farrar of Kansas City.

Knoxville, Tenn.—L. D. Tyson is promoting erection of apartment-house; five stories; 100x300 feet; pressed brick; marble trimmings; cost \$50,000.

Little Rock, Ark.—W. W. Bebb will erect store and apartment building; two stories; second story for apartments, containing 12 suites of rooms; cost \$18,000.

New Orleans, La.—Alcazar Realty Co. has plans prepared by Keenan & Weiss, 408 Iberville Bldg., New Orleans, for five-story-and-basement apartment-house; semi-fireproof; low-pressure steam heat; electric lighting; combination automatic passenger and freight elevator; cost \$60,000; contract not awarded. (See "Machinery Wanted.")

St. Louis, Mo.—J. Charles Mueller contracted with E. H. Schuerman to erect five and six-room flat to cost \$5000; with Mr. Kassebeyer to erect \$7000 flat; with Mr. Knickmeyer \$5100 flat, and with Mr. Althoff \$5100 flat. Mr. Mueller has also secured permits for erection of three flats for himself to cost \$16,000.

Washington, D. C.—Clifford M. Lewis, proprietor The Richmond, 17th and H Sts. N. W., has had plans prepared for remodeling four-story building on 17th street as apartment-house; cost \$8000.

Washington, D. C.—Harry Wardman, 1333 G St. N. W., has had plans prepared by A. H. Beers, 1333 G St. N. W., Washington, for apartment at New Hampshire Avenue and V street, and another at East Capitol and 7th streets; former will be seven stories; 130x75 feet; contain 69 apartments; cost \$250,000; latter will be three stories, contain 21 apartments, and cost \$30,000.

Washington, D. C.—Senator Warwick Huff has had plans prepared by Claugton West, 1808 Kalorama Rd. N. W., Washington, for remodeling Lee House at 1416 H street N. W.; building is of brick, three stories high; planned to devote first floor to salesroom and upper two floors to apartments.

Washington, D. C.—J. W. Hulse has had plans prepared by Leon E. Dessez, 1421 F St. N. W., Washington, for apartment-house; four stories and basement; steel, covered with metal lath; stucco exterior finish; fireproof; 45x112 feet; four apartments on each floor, making total of 16; hardwood interior

finish; gas and electric lighting; sanitary plumbing; electric elevator; contract will soon be awarded.

Washington, D. C.—Carrollton Apartment House Co. awarded contract to Gormley-Poynton Company, Union Trust Bldg., Washington, for erection of apartment-house; three stories and basement; 70x70 feet; ordinary construction; steam heat; electric and gas lighting; cost \$27,500; plans by Appleton P. Clark, Jr., 606 F St. N. W., Washington.

Washington, D. C.—Mrs. Charlotte Dalley, The Huron, purchased site at 1119 and 1121 14th street N. W., having frontage of 27 feet and depth of 30 feet; will erect apartment-house; brick; stone trimmings; four stories; two stores on ground floor, six office suites on second and apartments above; cost \$30,000; plans by Albert H. Beers, 1333 G St. N. W., Washington.

BANK AND OFFICE BUILDINGS

Adrian (not a P. O.), Texas.—Adrian Townsite Co. awarded contract to J. F. Cunningham, 4 Powell Bldg., Amarillo, Texas, to erect bank and office building at Adrian.

Beckley, W. Va.—Mullens Banking & Trust Co., M. F. Matheny, president, will begin construction of proposed building May 10; plans by Chas. G. Rabenstein, Charleston, W. Va.; orders placed for safe, vault doors, deposit boxes, etc.; will purchase other supplies. (See "Machinery Wanted.")

Brownwood, Texas.—Brownwood National Bank awarded general contract to Hood & Stagg, Brownwood, for brick and stone work on five-story-and-basement bank and office building recently mentioned; Joseph Krischke, Jr., has subcontract for other construction; fireproof building; reinforced concrete and brick; steam heat; electric lighting; electric elevators; heating and elevator contracts not let; contract price \$52,362. (See "Machinery Wanted.")

Courtland, Va.—Merchants & Farmers' Bank will rebuild burned bank building.

Deland, Fla.—Volusia County Bank awarded contract to W. P. Richardson Company, Jacksonville, Fla., for erection of bank building; cost \$30,000.

Gastonia, N. C.—Gastonia Insurance & Realty Co. has had plans prepared by Hook & Rogers, Charlotte, N. C., for office building; pressed brick; granite trimmings; 60x100 feet; four stories; contain 30 offices, two lodge halls and storeroom; electric elevator; steam heat; cost \$30,000. Wiley T. Rankin and others comprise building committee.

Helena, Ark.—Jos. L. Solomon will erect fireproof office building to replace structure recently reported burned; five or six stories; steel; steam heat; electric lighting; passenger and freight electric elevators; architect not engaged.

Houston, Texas.—O. L. White, proprietor Houston Trunk Factory, awarded contract to S. N. Ashmore of Houston to erect office and store building; two stories; 150x100 feet; steel and pressed brick.

Houston, Texas.—Settegast Realty Co. incorporated with \$350,000 capital stock by J. J. Settegast, Jr., C. E. Settegast, Charles S. Settegast and others; propose to erect 10-story fireproof office building.

Jacksonville, Fla.—W. A. Bisbee has had plans prepared by H. J. Klutho of Jacksonville for 10-story addition to 10-story building now about completed; same construction; reinforced concrete, with marble front for first four stories, white terra-cotta and copper to tenth floor; constructional walls of sides and rear of buff brick; skeleton framework of reinforced concrete and steel; corridors laid with white tiling; walls wainscoted to height of five feet with tiling; offices finished in hardwood; tungsten lighting; both buildings to be equipped with elevators, vacuum-cleaning system, ice-water piping, mail chutes, etc. (Previously mentioned.)

Johnson City, Tenn.—Bank of Commerce secured 10-year lease on Armburst-Smith building and will remodel for banking purposes; will build vault.

Louisville, Ky.—Board of Water-works, Sebastian Zorn, president, is considering erection of office building.

Manchester, Ga.—Manchester Development Co. is having plans prepared by Arthur W. Smith, Lagrange, Ga., for two-story brick and concrete building; to contain banking room for Bank of Manchester, two store-rooms, offices and lodgeroom.

Mount Airy, Md.—Mount Airy Savings Bank awarded contract to American Contracting Co., American Bldg., Baltimore, Md., for erection of fireproof bank building; plans by contractor.

Mount Airy, Md.—Kent County Savings

Bank awarded contract to American Contracting Co., American Bldg., Baltimore, Md., to erect fireproof bank building; plans by contractor.

Ovalo, Texas.—First State Bank, organized by L. J. Brian and others, will erect bank building.

San Antonio, Texas.—Wells-Fargo Express Co., Houston, Texas, will soon invite bids on remodeling office building at cost of \$10,000. (Recently mentioned.)

Siloam Springs, Ark.—State Bank of Siloam Springs will erect bank building; two stories; stone and brick; front of steel, stone and plate-glass.

Stanton, Texas.—Home National Bank had plans prepared by A. J. Olson, Cisco, Texas, for building recently mentioned; banking, business and office structure; two stories; 52x64 feet; brick; plate-glass openings and fronts; ordinary construction; wired for electricity; cost \$8000; bids to be opened May 8.

St. Joseph, Mo.—Corby Building Co., Room 14 Corby Bldg., awarded contract to Selden-Breck Construction Co., St. Louis, Mo., and St. Joseph, for erection of 12-story office and store building recently mentioned; steel construction; fireproof; elevators; cost \$410,000; plans by Eames & Young, St. Louis, and Eckel & Boschen, St. Joseph.

Sumner, Miss.—Building committee (T. G. James, B. E. Townes and R. L. Ward) of People's Bank will receive bids until May 10 for erection of bank building; certified check for 5 per cent. of bid. Plans may be seen at office of G. A. Lockhart, architect, 1234 Stahlman Bldg., Nashville, Tenn.; Fulmer, Jennings & Co., Jackson, Miss.; Stewart, Gwynne & Co., 100-102 South Front St., Memphis, Tenn., and at People's Bank, Sumner. Any information desired will be given by architect or committee.

Temple, Texas.—City National Bank has had plans prepared by Sanguinet & Staats, Fort Worth, Texas, for bank and office building; four stories; fireproof; steam heat; electric lighting; electric elevators; bids will be received May 8 at office of architects; estimated cost \$40,000 to \$50,000. (Previously mentioned.)

Texas City, Texas.—The Texas City Company, A. B. Wolvin, president, Duluth, Minn., will erect three-story office building, 60x110 feet. (See "Warehouses.")

Troy, Ala.—Standard Chemical & Oil Co. will rebuild burned office building.

Weiner, Ark.—Bank of Weiner, P. M. Bradford, president, will erect brick bank building.

White Hall, Md.—White Hall Farmer's Club and Improvement Association selected site 40x75 feet on which to erect bank building.

CHURCHES

Anderson, S. C.—Christian Church, Rev. J. T. Black, pastor, contemplates erecting edifice to cost \$15,000.

Brownwood, Texas.—Congregation will erect edifice. Address The Pastor, Cumberland Presbyterian Church.

Dallas, Texas.—Westminster Presbyterian Church will expend about \$30,000 to erect edifice; brick; stone trimmings; Gothic style; auditorium to seat 600; Sunday-school building to be separate; F. H. Dealey, chairman board of trustees. (Recently mentioned.)

Falls Church, Va.—Congregation will erect stone edifice to cost \$7000. Address The Pastor, Columbian Baptist Church.

Fort Worth, Texas.—St. Andrews Episcopal Church has plans by Sanguinet & Staats, Fort Worth, for edifice; exterior of Texas limestone, triumphed with molded buttresses, caps, cornices, arches, etc.; slate roof; two main entrances through stone portico; interior, 62 feet wide, including nave and side aisles, and 94 feet deep; two transepts, 15x24 feet; nave proper, 35 feet wide, with four Gothic columns 20 feet high on each side; main ceiling of nave, 58 feet high; baptistery to have cathedral glass windows on two sides and white marble tile flooring; bronze railings and gate; nave and transept to have seating capacity of 850; interior treatment to be either combination of pressed brick and terra-cotta with five-foot impervious brick wainscoting, etc., or sand-finished plaster; steam heat; gas and electric fixtures; cost from \$60,000 to \$100,000. (Previously mentioned.)

Gonzales, Texas.—Congregation will erect edifice. Address The Pastor, Mexican Baptist Church.

Houston, Texas.—Church of Blessed Sacrament will erect edifice. Rev. Jacob Schnetzler, pastor.

Howe, Texas.—Congregation will erect edifice to cost \$5000. Address The Pastor, Methodist Church.

Jackson, Tenn.—First Baptist Church, Dr. Virgin, pastor, has had plans prepared by R. H. Hunt, Chattanooga, Tenn., for proposed edifice; gray pressed brick; stone trimmings; Ionic architecture; stone columns in front; combined seating capacity of Sunday-school room and main auditorium 1200; Sunday-school to contain 26 classrooms; estimated cost \$50,000.

Jasper, Ala.—Methodist Church will erect edifice to cost \$15,000. J. H. Pankhead, Jr., R. H. Palmer and others are in charge.

Jennings, Md.—Lutheran Church awarded contract to Charles E. Engle, Frostburg, Md., to erect concrete-block edifice.

Johnson City, Tenn.—Congregation will erect edifice. Address The Pastor, First Baptist Church.

Kansas City, Mo.—Congregation will erect edifice to cost \$8000. Address The Pastor, Budd Park Baptist Church.

Lewisburg, Tenn.—Congregation will erect edifice. Address The Pastor, U. S. A. Presbyterian Church.

Memphis, Tenn.—Holy Trinity Episcopal Church, Rev. Prentice A. Pugh, pastor, will erect addition and make other improvements to church building and erect rectory.

Memphis, Tenn.—Bellevue Avenue Baptist Church, Rev. H. P. Hurt, pastor, approved plans by John Galsford, architect, of Memphis, for proposed edifice; walls of brick with marble facing; terra-cotta trimmings; dining-room and kitchen in basement; roof arranged for open-air services; estimated cost, \$50,000; E. L. Bass, chairman building committee.

Newport, Tenn.—M. E. Church South will erect brick and concrete edifice to replace structure recently burned; contemplate concrete, brick and stone building 60x60 feet; hot-water or steam heat; electric lighting; cost \$10,000; correspondence with architects and builders desired; J. F. Woodward, secretary building committee. (See "Machinery Wanted.")

Parkersburg, W. Va.—Congregation is considering erection of edifice. Address The Pastor, First Methodist Episcopal Church.

Rich Hill, Mo.—M. E. Church South will rebuild edifice; will probably use old walls; cost \$5000; R. E. Hoover, president official board.

Richmond, Va.—Congregation will erect edifice. Address The Pastor, Allen Avenue Christian Church.

Rock Hill, S. C.—First Presbyterian Church, Rev. Alex. Martin, pastor, will erect edifice in Oakland to cost \$15,000.

Savannah, Ga.—Frank Woolard of Savannah has contract for interior finishing work of Synagogue B'nai B'rith Jacob; balconies on three sides; ceiling, ornamental plaster; skylight; first floor to contain Sunday-school room, lecture-room, etc.; upper floor, auditorium, with accessory rooms; entrance vestibule to have Moresque arches and tiled floors; estimated cost \$15,000; total cost \$50,000; exterior of building completed; plans by H. W. Witcover of Savannah.

Snyder, Texas.—Second Baptist Church, Rev. Mr. Tyra, pastor, will erect edifice.

Snyder, Texas.—Congregation will erect edifice; brick; stone finish; cost \$15,000. Address The Pastor, Methodist Church.

St. Joseph, Mo.—Congregation will erect church, parish-house and parochial school to cost \$150,000. Address The Pastor, St. Patrick's Catholic Church.

Tampa, Fla.—Palm Avenue Baptist Church is having plans prepared by Shaw & Jay of Tampa for edifice; pressed brick and stone; cost \$30,000.

Weatherford, Texas.—Congregation will erect edifice. Address The Pastor, Cumberland Presbyterian Church.

West Palm Beach, Fla.—Congregation contemplates erecting edifice. Address The Pastor, Christian Science Church.

COURTHOUSES

Arnett, Okla.—Ellis county will vote in May on \$50,000 bond issue for courthouse recently mentioned; T. W. Sumpter, County Commissioner.

Dade City, Fla.—Board of County Commissioners will receive bids until May 10 for building courthouse; plans and specifications at office of E. C. Hosford & Co., Eastman, Ga., and office of A. J. Burnside, clerk County Commissioners, Dade City; building to be two stories; fireproof; stone base to water-table line and pressed brick above, with stone trimmings, columns, etc.; slate roof; second-floor ceiling in hollow tile or concrete construction of fireproofing; main roof over courtroom supported by steel trusses; tower covered with galvanized steel; interior walls of brick or fireproof

construction; main hall to have fireproof stairway, with marble treads and ornamental iron railing; floor of main hallways of first and second floors laid with Georgia marble, tile or ceramic tile; first floor to contain offices for various county officials and several vaults; concrete wall, reinforced with tool-proof bars, for prisoners' room; record rooms of first floor to be provided with fireproof windows and steel rolling shutters; cement-finish flooring.

Hugo, Okla.—Choctaw County Commissioners will call election for June 22 on bond issue of \$125,000 for erection of courthouse and jail, J. W. Milam, county clerk.

Kansas City, Mo.—Jackson County Court instructed architect to prepare plans for fireproof vault to cost \$6000.

Roby, Texas.—Fisher county is having plans prepared by Andrew J. Bryan, St. Louis, Mo., for \$80,000 courthouse recently noted; steam heat; bids to be opened about June 1; J. D. Barker, County Judge.

Rocky Mount, Va.—Franklin county is considering erection of courthouse to cost \$25,000. Address County Commissioners.

DWELLINGS

Athens, Ala.—Methodist Church will erect \$5000 parsonage. Address The Pastor, Methodist Church.

Atlanta, Ga.—Stephen T. Barnett will erect residence.

Atlanta, Ga.—Dr. Strickler will erect residence.

Augusta, Ga.—Dr. W. H. Goodrich awarded contract to Woodward Lumber Co., Augusta, for erection of dwelling recently mentioned; stucco; vapor and steam heat; electric lighting; cost \$6000; plans by L. F. Goodrich, Augusta.

Baltimore, Md.—Provident Realty Corporation, 220 St. Paul St., will erect residence at Walbrook; frame; stone and concrete foundation; cost \$4000.

Baltimore, Md.—George D. Iverson, Jr., 2430 Reisterstown road, owner, will erect 12 dwellings; 16x60 feet; steam heat; gas and electric lighting; cost \$60,000; will use former plans. (Recently noted to erect six dwellings.)

Baltimore, Md.—George J. Noeth, 2827 East Monument St., awarded contract to W. A. Tagg, 1202 East North Ave., Baltimore, for erection of four dwellings on Olive street; two stories; brick; 15x46 feet; cost \$9000; plans by Henry J. Tinley, Hoffman Bldg., Baltimore.

Baltimore, Md.—Chas. H. Stoner, 1927 West Lombard St., owner, will himself erect six two-story brick dwellings on Brice street, recently mentioned; ordinary construction; hot-air heating; gas lighting; plans by Jacob F. Gerwig, 210 East Lexington St.

Baltimore, Md.—E. J. Cox, Associated Press, 123 East Baltimore St., has had plans prepared by and awarded contract to Louis J. Gardner, 1602 West Lanvale St., Baltimore, for erection of residence at Severna Park; 26x39 feet; bungalow type; ordinary construction; hot-water heat; cost \$2700.

Baltimore, Md.—George A. Cook, 2747 North Calvert St., awarded contract to William Wiedner, Baltimore, for erection of 17 dwellings on York road; two stories; brick; 14x75 feet; brick foundations; slab roof; cost \$27,000.

Baltimore, Md.—Henry Grinsfelder, 3 Hanover St., has had plans prepared by Louis Lev, American Bldg., Baltimore, for residence at 2020 Eutaw Place; contractors estimating include James F. Farley, Franklin Bldg.; Wm. H. Porter & Son, 505-507 Forrest St.; R. B. Mason, 324 West Biddle St.; C. L. Stockhausen, National Marine Bank Bldg.; J. J. Moylan, 117 East Center St.; Jos. Shamburgh, 2122 East Baltimore St., all of Baltimore.

Baltimore, Md.—Anton Muller, 217 West Mulberry St., awarded contract to Jos. Schamberger, 2122 East Baltimore St., Baltimore, for erection of residence; three stories; brick; 19x31 feet; steam heat; cost \$2500.

Baltimore, Md.—Forest Park Co., 601 Maryland Telephone Bldg., awarded contract to James L. Constantine, Arlington, Md., for erection of residence on Berwin avenue; cost \$5000.

Baltimore, Md.—Piel Construction Co., 233 Edmondson Ave., will erect eight dwellings on Arunah avenue; two stories; brick; one 26x22 feet, the others 26x40 feet; stone foundations; cost \$28,000.

Birmingham, Ala.—R. E. Hill, 1410 Huntsville Ave., awarded contract to J. T. Smith, North Birmingham, for erection of dwelling recently mentioned; two stories; frame; seven rooms; cost \$3500.

Birmingham, Ala.—Mrs. R. M. Jenkins will erect brick residence to cost \$15,000.

Birmingham, Ala.—Mrs. R. McConnell will erect two-story brick residence; cost \$7000.

Bluefield, W. Va.—Joseph M. Sanders has had plans prepared by Pedigo & Garry, Kelly & Moyer Bldg., Bluefield, for residence; red pressed brick; limestone trimmings; concrete foundation; slate roof, with copper valleys and gutters; hot-water heat; cold-storage plant; annunciator system; contract for plumbing awarded to W. A. Bodell, Bluefield; construction under supervision of architect.

Bryan, Texas.—A. M. Waldrop awarded contract to H. T. Lewis, Bryan, for erection of dwelling; 31x34 feet; two stories; eight rooms; ordinary construction; frame; fireplaces and stoves; electric lights; cost \$4300; plans by Jones & Tabor, Houston, Texas. (Recently noted.)

Chattanooga, Tenn.—J. Milton Browne, 22 East 8th St., awarded contract to John E. Davis, Chamberlain Bldg., Chattanooga, for erection of proposed three one-story frame bungalow-style dwellings to cost \$3000; shingle roofs; electric and gas lighting; hard pine interior finish.

Chattanooga, Tenn.—C. A. Grimmer, 1916 McCallie Ave., is having preliminary plans prepared by Huntington & Sears, News Bldg., Chattanooga, for residence at 615 Duncan avenue.

Chattanooga, Tenn.—Alien Bros., 814 James Bldg., will erect six-room one-story shingle-roof bungalow, costing \$3000, having large brick mantel; also \$4000 eight-room two-story brick dwelling; basement; tin-shingle roof; concrete basement floor; hard pine interior finish; electric and gas lighting; hot-air heating.

Chattanooga, Tenn.—Dr. W. H. Warren-fells, 727½ Market St., is having plans prepared by Wilbur M. Johnson, 502 East 24th St., Chattanooga, for \$5000 brick dwelling on Mission Ridge; details not decided.

Chevy Chase, Md.—George P. Hale, 1430 W St. N. W., Washington, D. C., will erect residence at Chevy Chase.

Chevy Chase, Md.—A. M. Schneider, 718 14th St. N. W., Washington, D. C., will erect \$8000 residence at Chevy Chase.

Chevy Chase, Md.—Frederick Cromwell, 231 Ontario Rd.; Mrs. Marguerite Cromwell and Miss Annie Cromwell, all of Washington, D. C., are each having plans prepared by N. T. Haller, Corcoran Bldg., Washington, for dwellings at Chevy Chase; pebble-dash finish; slate roof; hot-water heat; gas and electric lights; cost \$5000 each.

De Funak Springs, Fla.—M. Vinson will erect residence.

Dermott, Ark.—S. B. Alexander and Joseph Cohen will each erect residence.

Durant, Okla.—George Mason will erect residence.

Fayetteville, N. C.—J. F. Gilmore, Rex, N. C., will erect residence in Fayetteville.

Fayetteville, W. Va.—Floyd Keller will erect residence.

Fredericksburg, Va.—H. M. Eckenrode will erect residence.

Gardenville, Station Baltimore, Md.—Evangelical Lutheran Jerusalem Church will erect parsonage; Rev. W. E. Huff, pastor.

Hagerstown, Md.—O. S. Highberger awarded contract to Geo. O. Harne, Hagerstown, for erection of dwelling; stone; electric lights; contract for electric wiring awarded to S. W. K. Miller, Hagerstown; plans by Edgar C. Snyder, Hagerstown.

Holliday's Cove, W. Va.—Phillips Sheet & Tin Plate Co., D. M. Weir, secretary-treasurer, Clarksburg, W. Va., will erect dwellings at new townsite—Weir City. (See "Iron and Steel Plants.")

Huntingdon, Tenn.—J. Clarence Johnson will erect residence.

Kansas City, Mo.—J. C. Fennell will erect residence; colonial style; stone; cost \$25,000.

Kansas City, Mo.—J. W. Aylor, Carthage, Mo., has had plans prepared by Shepard & Farrar, Kansas City, for residence at Kansas City; English manor style; rough stone body with cut-stone trimmings; three and a half stories; 90x44 feet; tile roof; bathroom of marble built on steel frame; cost \$50,000.

Memphis, Tenn.—Holy Trinity Episcopal Church, Rev. Prentiss A. Pugh, rector, will erect rectory.

New Orleans, La.—Mrs. Wm. Keenan awarded contract to Geo. W. Forrest, 336 Belleville St., New Orleans, for residence; 10 rooms; ordinary construction; fireplace grates; gas lighting; cost \$3200.

New Orleans, La.—Louise Marques has had plans prepared by A. F. Theard, New Orleans, for residence; two stories; frame; tile roof; electric lights.

New Orleans, La.—H. F. Hinrichs, New Orleans, has prepared plans for residence on Neron street; two stories; frame; slate roof.

New Orleans, La.—Mrs. A. Rive has had plans prepared by R. Sidney Hernandez, New Orleans, for residence; two stories; frame; slate roof; electric lights.

New Orleans, La.—J. H. Witte has had plans prepared by N. Clcharme, New Orleans, for double cottage; frame; slate roof; electric lights.

New Orleans, La.—Jacob Pabst, 2039 2d St., will erect residence; two stories; frame.

New Orleans, La.—Miss Helen Billet has had plans prepared by J. M. Emmons, New Orleans, for double residence; two stories; frame; slate.

New Orleans, La.—John Meyers has had plans prepared by S. P. Simone, New Orleans, for double cottage.

New Orleans, La.—R. G. Bush, Jr., has had plans prepared by N. Richarme, New Orleans, for residence; two stories; stucco; ordinary construction; hot-air heat; electric lights; cost \$4000.

New Orleans, La.—John H. Harwood will erect double residence; two stories; frame; slate roof.

New Orleans, La.—V. Wilde has had plans prepared by Dannemann & Charlton, New Orleans, for residence; two stories; frame.

New Orleans, La.—Julian S. Winehill has had plans prepared by Keenan & Weiss, New Orleans, for residence; two stories; frame; tile roof; electric lights; cost \$7500.

New Orleans, La.—Anthony Martina will erect double cottage; frame; slate roof.

New Orleans, La.—Alexander Hay, 127 Cañonete St., has prepared plans for two-story-and-attic frame residence; 30x60 feet; concrete and cement-block foundations; tile roof; fireplaces and gas steam radiators; electric and gas lighting; cost \$5500.

New Orleans, La.—Noel Bunot has had plans prepared by O. P. Mohr, 7th Maison Blanche Bldg., New Orleans, for double frame cottage; brick foundations and trimmings; cost \$3500.

Norfolk, Va.—W. J. Ready will erect two-story brick tenement to cost \$12,000.

Piedmont, N. C.—E. G. Gaffney, Charlotte, N. C., will erect residence at Piedmont.

Pocahontas, Va.—Pocahontas Big Vein Coal Co. awarded contract to A. G. Kiser, Tazewell, Va., for erection of 14 dwellings. (See "Coal Mines and Coke Ovens.")

Raleigh, N. C.—Mrs. B. Smedes has had plans prepared by Burrett H. Stephens, Wilmington, N. C., for residence; furnace heat; electric and gas lighting; estimated cost, \$3000.

Raleigh, N. C.—W. R. Smith has had plans prepared by Burrett H. Stephens, Wilmington, N. C., for residence; electric and gas lighting; estimated cost, \$3500.

Raleigh, N. C.—Grimes Realty Co. has had plans prepared by Burrett H. Stephens, Wilmington, N. C., for five residences; estimated cost, \$20,000.

Raleigh, N. C.—C. R. Briggs has had plans prepared by Burrett H. Stephens, Wilmington, N. C., for residence; furnace heat; electric lights; estimated cost, \$3000.

Rome, Ga.—W. J. Shaw will erect residence.

Stamford, Texas.—W. T. Andrews will erect residence.

St. Louis, Mo.—J. Charles Mueller has contracted for erection of two residences for J. C. Greulich to cost \$5600, and one for Mr. Fieldbush to cost \$7600.

Texas, Md.—James O'Hara will erect residence.

Troy, Ala.—Abe Rosenberg awarded contract to Fox Henderson, Troy, for erection of residence; two stories; hot-air heat; plans by B. B. Smith, Montgomery, Ala.

Troy, Ala.—Lamar Jernigan awarded contract to Fox Henderson, Troy, for erection of residence; two stories; frame; plans by Frank Lockwood, Montgomery, Ala.

Tuscaloosa, Ala.—M. E. Church South had plans prepared by Geo. T. Barber & Co., Knoxville, Tenn., for parsonage recently noted; 10 rooms; two stories; brick veneer; grates and steam heat; electric lighting; cost \$5000 to \$6000; R. B. Cooper, chairman building committee.

Washington, D. C.—John W. Titcomb, 1605 Irving St. N. W., will erect residence recent-

ly mentioned; three stories; brick; 28x36 feet; plans by Arthur B. Heaton, 1319 F St., Washington.

Washington, D. C.—J. M. Carmody has had plans prepared for two dwellings on 4th street N. E.; cost \$4000; owner builder.

Washington, D. C.—Gibson Fahnestock, 1812 I St. N. W., has had plans prepared by Nathan Wyeth, 1517 H St. N. W., Washington, for residence; four stories; Italian style; limestone and Roman brick; 48x88 feet; electric elevator.

Washington, D. C.—Bates Warren, 416 Fifth St. N. W., awarded contract to Winfield Preston, 1417 Fifth St. N. W., Washington, for erection of two four-story brick, iron and frame dwellings at 1419 and 1421 Columbia road northwest; cost \$70,000; plans by Hunter & Bell, 518 10th St. N. W., Washington.

Washington, D. C.—R. W. Boiling, The Corova, will erect residence.

Washington, D. C.—A. H. Beers, 1333 G St. N. W., has prepared plans for 14 two-story residences on Otis street; cost \$4000 each.

Washington, D. C.—Robert Craig, 1822 I St. N. W., will erect residence on Wyoming avenue.

Washington, D. C.—Nellie A. Venable has had plans prepared by Speiden & Spelden, 1403 New York Ave. N. W., Washington, for residence on 7th street N. E.; two stories and basement; red brick; brownstone trimmings; hot-water heat; 15x45 feet.

Washington, D. C.—P. Latimer, Clarendon, Va., awarded contract to C. V. Wilson, Washington, for erection of residence at Washington; two stories; frame; mission style; stucco finish; slate roof; hot-air heat; electric lights; plans by Oscar G. Vogt, Corcoran Bldg., Washington.

Washington, D. C.—N. T. Haller, Corcoran Bldg., Washington, has prepared plans for 10 dwellings at Water and Irving streets; red brick; white stone trimmings; hot-water heat; gas lights; cost \$3000.

Washington, D. C.—Chas. F. and W. L. Dowd, 60 L St. N. W., have had plans prepared by A. H. Beers, 1333 G St. N. W., Washington, for eight dwellings on Florida avenue and I street N. E.; cost \$3000 each.

Weatherford, Texas.—George C. Poston awarded contract for erection of \$6200 residence.

West Palm Beach, Fla.—T. J. Grier, West Palm Beach, has contract to erect \$3000 residence.

West Palm Beach, Fla.—Richard Croker awarded contract to J. I. McDonald, West Palm Beach, for erection of residence.

West Palm Beach, Fla.—William Lanchart will erect \$5000 concrete residence.

West Palm Beach, Fla.—Mrs. Louisa Clarke will erect \$25,000 bungalow.

West Palm Beach, Fla.—Richard Rushton will erect residence.

Wheeling, W. Va.—Mr. Eldele, Zane Ave., awarded contract to Charles Ise, Wheeling, for erection of residence at Warwood.

Wilmington, N. C.—W. G. Elliott had plans prepared by Burrett H. Stephens, Wilmington, for \$3000 residence; hot-air heat; electric and gas lighting.

Wilmington, N. C.—Clayton Giles, Jr., awarded contract to Stephens Construction Co. for erection of \$3000 residence after plans by B. H. Stephens, Wilmington; colonial style; hot-air heat; electric lighting.

Wilmington, N. C.—F. W. Dick will erect \$3000 residence; hot-air heat; electric and gas lighting; plans by Burrett H. Stephens, Wilmington.

Wilmington, N. C.—M. F. Allep had plans prepared by Burrett H. Stephens, Wilmington, for residence; furnace heat; electric and gas lighting; estimated cost, \$3000.

Wilmington, N. C.—F. T. Allen had plans prepared by Burrett H. Stephens, Wilmington, for residence; furnace heat; electric and gas lighting; estimated cost, \$3000.

Wilmington, N. C.—J. H. James has had plans prepared by Burrett H. Stephens, Wilmington, for residence; hot-air heat; electric lights; estimated cost, \$5500.

Winona Cliffs (not a postoffice), Md.—Winona Cliffs Company, Walter T. Startzman, president, 948 Equitable Bldg., Baltimore, Md., is having plans prepared by J. E. Lafferty, 11 East Pleasant St., Baltimore, for two additional bungalows.

GOVERNMENT AND STATE BUILDINGS

Clarksburg, Miss.—Home.—West Virginia Humane Society, R. H. Brown, secretary,

will select site for State home; bids will then be invited; \$20,000 appropriated by Legislature.

Cumberland, Md.—Hospital.—Western Maryland Hospital awarded contract at \$7719 to Silas W. Wise, Cumberland, for erection of addition to hospital building.

Danville, Ky.—Postoffice.—Bids will be received at office of James Knox Taylor, supervising architect, Treasury Department, Washington, D. C., until June 2 for construction complete of United States postoffice at Danville, in accordance with drawing and specification, copies of which may be had at above office or of postmaster at Danville, at discretion of supervising architect.

Fort Crockett, P. O. Galveston, Texas—Barracks.—Bids will be received at office of Constructing Quartermaster until May 31 for construction, plumbing, heating and electric wiring of 26 reinforced concrete buildings at Fort Crockett. Plans, specifications and full information furnished upon application to above office. It is proposed to erect this year two two-story barracks buildings to accommodate 109 men each, and next year to build a third barracks of same size and construction; other structures planned to be constructed this year will include 'avatories and mess halls for barracks, six or eight officers' quarters of single-set class, administration building, guardhouse, bakery, quartermaster shops, blacksmith and carpenter shop, hospital building, hospital sergeant quarters, five or six sets non-commissioned officers' quarters, etc.; company officers' quarters will consist of two-story houses with about six or seven rooms; field officers' quarters will be similar; hospital, administration building, post exchange and gymnasium will each be two stories high; between \$125,000 and \$175,000 is available. Address Capt. P. Whitworth, Quartermaster, U. S. Army. (Mentioned in February.)

HOTELS

Adrian (not a P. O.), Texas.—Adrian Townsite Co. awarded contract to J. F. Cunningham, 4 Powell Bldg., Amarillo, Texas, to erect 50-room hotel to cost \$45,000.

Beaumont, Texas.—W. E. Paxton is reported interested in erection of 30-room hotel and fishing and bathing pier at Paxton's Beach.

Blytheville, Ark.—Blytheville Hotel Co. organized with A. C. Lange, president; W. W. Hollister, vice-president; A. M. Butt, secretary, and T. J. Mahan, treasurer; will erect brick hotel to cost \$30,000.

Cisco, Texas.—Aaron Mayhew has awarded contract for erection of 60-room hotel.

Kernersville, N. C.—Dr. C. C. Sapp will erect hotel.

Pensacola, Fla.—Turner Construction Co., general contractor, Pensacola, awarded subcontract at about \$30,000 to Alien & Curry, 2 Chamberlain Bldg., Chattanooga, Tenn., for hollow-tile and stucco exterior and hollow-tile interior fireproofing on building for San Carlos Hotel Co.; reinforced concrete structure; seven stories and basement. (Previously mentioned.)

Sour Lake, Texas.—Edward Malavans has purchased Ketterson Building; will remove to new location and remodel as hotel; to have 150 feet of 8-foot gallery; bathrooms.

St. Louis, Mo.—Lorraine Hotel Co. incorporated with \$15,000 capital stock by Herman Mack, Sadie H. Mack and Harry H. Dunbar.

MISCELLANEOUS STRUCTURES

Augusta, Ga.—Store Building.—A. G. Rhodes & Son Furniture Co. awarded contract to E. H. Mobley, Augusta, for erection of store building recently mentioned; three stories; 34x135 feet; stone and pressed-brick front; cost \$15,000.

Baltimore, Md.—Restaurant.—Ralph Goldman, 2126 Madison Ave., will expend about \$30,000 for improvements to Kaiser Restaurant; will erect addition 39x55 feet; two stories; addition to be erected in front of present structure; contract for improvements awarded to J. E. Stanfield, 2522 Pennsylvania Ave., Baltimore.

Baltimore, Md.—Store Building.—Charles Zimmerman & Sons, 2406 Pennsylvania Ave., awarded contract to R. H. Frazer & Son, 220 St. Paul St., Baltimore, for erection of store building at Pennsylvania Avenue and Cumberland street; 31x70 feet; three stories; pressed-brick front; stone trimmings; plate-glass show windows.

Baltimore, Md.—Business Building.—John J. Cowan, 901 Hollins St., awarded contract to Wm. F. Welsh, 250 West Preston St., Baltimore, for erection of two additional stories to structures at 822 and 834 West Lombard street; plans by John K. Stack, 12 East Lexington St., Baltimore.

Baltimore, Md.—James King & Co., 4-14 North High St., has had plans prepared by John Freund, Jr., 210 East Lexington St., Baltimore, for carriage-house at 21-23 North High St.; three stories; 26x141.9 feet; dark iron-spot brick front; bids to be received until May 10; contractors estimating include Charles L. Stockhausen, National Marine Bank Bldg., Baltimore.

Baltimore, Md.—H. Weis & Son, 801-805 Pennsylvania Ave., is having plans prepared by Louis Levi, American Bldg., Baltimore, for erection of store building; 24x123 feet; three stories and basement; present building will be improved.

Beaumont, Texas—Store Building.—Neill Stark, Dallas, Texas, awarded contract to H. M. McKnight & Co., Beaumont, for improvements to store building occupied by Hecht-Moke Company; will erect three additional stories and install plate-glass front. (Noted in March.)

Beaumont, Texas—Business Building.—Mixon Bros. will erect business building; 75x175 feet; cost \$6000.

Brownsville, Texas—Hospital.—O. B. Works has awarded contract for erection of hospital building.

Centerville, Ala.—Jail.—Blbb county will award contract in about 12 months for erection of jail recently noted; fireproof structure; two stories; about 55x70 feet; steam heat; cost within \$30,000; architect not selected; W. L. Pratt, Judge of Probate.

Charlotte, N. C.—Store Building.—H. M. Eiford has had plans prepared by Hook & Rogers, Charlotte, for department-store building; five stories; pressed brick; slow burning; site 50x160 feet; hot-air heat; ventilating apparatus; electric elevators.

Charlotte, N. C.—Store Building.—First National Bank awarded contract for erection of addition to store building occupied by J. B. Ivey Company to E. N. Overcash, Charlotte; two stories and basement; 46x71 feet; connected with present structure by archways 15 feet wide; plans by R. C. Bilberstein, Four C's Bldg., Charlotte.

Cotton Plant, Ark.—Store Buildings.—R. R. James Mercantile Co. awarded contract to H. F. Doyle, Cotton Plant, for erection of three one-story plate-glass front press-brick store buildings; cost \$16,500.

Dallas, Texas—Garage.—W. E. Easterwood, Wills Point, Texas, and B. L. Fielder, Sherman, Texas, will erect garage in Dallas for Buick Automobile Co.; plans by C. D. Hill & Co., Dallas; three stories; cost \$15,000.

Dallas, Texas—Store Building.—Max Goettinger, Louis Schwatz and others having plans prepared by Lang & Witchell, Dallas, for store building; four stories; mill construction.

Dallas, Texas—Business Building.—W. A. Frazer has plans prepared by Lank & Witchell, Dallas, for business building recently mentioned; ordinary construction; 50x90 feet; heating not decided; electric lighting; cost \$15,000; contract to be awarded soon.

Dermott, Ark.—Business Block.—Joseph Cohen will erect business block.

Dermott, Ark.—Postoffice Building.—E. B. Remley & Co. contemplate erection of post-office building.

Dublin, Texas—Business Building.—J. H. Latham, chairman building committee, is receiving bids for erection of two-story brick and stone business building.

El Reno, Okla.—Business and Lodge Building.—L. G. Adams contemplates erection of three-story building for business and lodge rooms; fireproof; size 39x100 feet; electric lighting; desires plans and specifications.

Grenada, Miss.—Store Building.—Windham & Miers, Elliott, Miss., contemplate erection of store building at Grenada.

Harrisonburg, Va.—Hospital.—Rockingham Memorial Association has purchased site 310x150 feet and will erect hospital building; T. O. Jones, J. S. Messerly, both of Harrisonburg, and E. U. Hoenshel, Dayton, Va., committee.

Harrisonburg, Va.—Garage.—J. C. Staples will erect garage, to be occupied by R. W. Bradford; two stories; brick; metal roof; 56x56 feet; electric lighting; freight elevator; cost \$3000; plans and construction by owner. (See "Machinery Wanted.")

Heber, Ark.—Stores.—Anna Mitchell, Argenta, Ark., had plans prepared by Chas. L. Thompson, Little Rock, Ark., for two store-houses recently noted (under name of Dr. Richardson); 40x30 and 20x60 feet in size; electric lighting; cost \$4000.

Henderson, Texas—Business Buildings.—M. Kangerga & Bro. will erect three two-story brick business buildings.

Hertford, N. C.—Business Building.—T. C. Blanchard & Bro. will erect business building; two stories; brick; 49x100 feet.

Houston, Texas—Store Building.—O. L. White awarded contract to S. N. Ashmore, Houston, for erection of store building; 150x100 feet; two stories.

Huntingdon, Tenn.—Stable.—J. Clarence Johnson will erect brick stable.

Jackson, Ga.—Hardware and Furniture Building.—I. S. Johnson & Co. awarded contract to E. I. Rook, Jackson, for erection of hardware and furniture building recently mentioned; 44x98 feet; plate-glass front.

Jasper, Ala.—Business Building.—T. L. Long will erect business building; two stories; 26x120 feet; brick.

Keyser, W. Va.—Livery Stable.—Potomac Milling & Ice Co. will erect stable recently mentioned; three-story brick structure; 90x100 feet; no inside wall; steel girders, with post supports for second and third floors; first floor concrete; electric lighting; electric elevator; cost \$15,000; plans by C. W. Shelly, Keyser; S. N. Nevins, manager. (See "Machinery Wanted.")

Little Rock, Ark.—Scottish Rite Masons have had plans prepared by Charles L. Thompson, Little Rock, for Albert Pike Conistory, recently mentioned; three stories; 50x130 feet; steam heat; electric lights; cost \$60,000.

Little Rock, Ark.—Store and Apartment Building.—W. W. Beno will erect store and apartment building; two stories; cost \$18,000.

Little Rock, Ark.—Orphanage.—Methodist Board of Trustees planning to erect orphanage; Geo. Thornburgh, G. H. Kimball and W. R. Casey, building committee.

Madisonville, Tenn.—Jail.—Bids will be received until May 15 for erection of jail and sheriff's residence at Madisonville; recently noted; two stories; 36x70 feet; fireproof construction; steam heat; grates; certified check for 10 per cent. amount of bid; plans on file at office of Bauman Bros., Knoxville, Tenn., and with W. A. Ghormley, county clerk, Madisonville.

Memphis, Tenn.—Store Building.—J. A. Evans is having plans prepared for four-story addition to Gerber's store building; rear part of structure will be demolished and proper connections made; cost \$10,000.

Meridian, Miss.—Clubhouse.—Stonewall Club will erect \$20,000 clubhouse.

Norfolk, Va.—Y. M. C. A. Building.—Building Committee Young Men's Christian Association awarded contract to E. Tatterson, Norfolk, recently mentioned as lowest bidder, for erection of six-story fireproof building; swimming pool; gymnasium; 50 bedrooms; heating, lighting and elevators not decided and to be let under separate contract; cost \$150,000; plans by R. E. Mitchell, Norfolk, and Wood, Donn & Deming, Washington, D. C.

Oak Hall, Va.—Public Hall.—Oak Hall Public Building Co. incorporated with \$5000 capital stock; S. W. Matthews, president; T. N. Lawrence, vice-president; J. L. Byrd, secretary and treasurer; will erect public hall.

Oklahoma City, Okla.—Business Building.—George Reagen will erect four-story business building.

Parkersburg, W. Va.—Lodge Building.—Parkersburg Lodge, No. 7, I. O. O. F., is planning to erect lodge building; four stories and basement; 50x10 feet; brick with stone trimmings; cost \$35,000; Jesse Silcott, D. A. Hawkins and Charles Coffman, Building Committee.

Pine Bluff, Ark.—Business Building.—C. H. Triplett awarded contract to Mr. Royse, Pine Bluff, for erection of business building; two stories; brick.

Portsmouth, Va.—Whichard Realty Corporation awarded contract to John H. Pierce, Portsmouth, for erection of store building for Whichard Bros.; 40x100 feet; pressed-brick front; four stories; cost \$15,000.

Richmond, Va.—Clubhouse.—Country Club of Virginia awarded contract to Myers-Turpin Construction Co., Norfolk, Va., for erection of proposed clubhouse; three stories; red pressed brick; cost \$33,000.

Rocky Mount, N. C.—Business Building.—G. T. Matthews awarded contract to D. J. Rose & Co., Rocky Mount, for erection of business building; 24x80 feet; pressed brick; plate-glass windows; cost \$4000.

Rome, Ga.—Business Block.—United Drug & Improvement Co. will erect business block; two stories; brick; cost \$6000.

St. Joseph, Mo.—Parish-house.—St. Patrick's Catholic Church will erect parish-house, school and church building, to cost \$150,000. Address The Pastor, St. Patrick's Catholic Church.

St. Louis, Mo.—Store Building.—J. Charles Mueller has contracted with Mr. Kronschein to erect \$7000 store building.

Tampa, Fla.—Store Building.—Crenshaw

Bros. will erect store building; two stories; brick.

Tampa, Fla.—Business Building.—A. Nistal awarded contract to J. C. McNeill, Tampa, for erection of addition to business building; two stories; frame; 33-foot frontage; cost \$500.

Temple, Texas—Business Building.—A. L. Flint will erect business building; two stories; brick; cost \$10,000.

Temple, Texas—Business Building.—James Budd will erect two-story brick business building; cost \$10,000.

Temple, Texas—Business Block.—James Rudl will erect two-story brick business block; estimated cost \$10,000.

Tulsa, Okla.—Business Building.—E. J. Haywood, Marion, Ky., will erect business building; steel and concrete; two stories and basement; cost \$20,000.

Tulsa, Okla.—Stable.—J. W. Hickok will erect addition to stable; two stories; brick; 140 feet deep; cost \$10,000.

Tulsa, Okla.—Business Building.—Fred Scott will erect business building; three stories; brick; cost \$16,000.

Tulsa, Okla.—Car Barns.—Tulsa Street Railway Co. will erect brick car barn; 80x140 feet; to accommodate 30 cars.

Victoria, Texas—Business Building.—Mrs. Gillespie, Coleman, Texas, awarded contract to Bailey Mills Company, Victoria, for erection of business building; two stories; brick; cost \$4500.

Waycross, Ga.—Jail.—Ware county contemplates issuance of \$200,000 of bonds to erect school buildings, jail building and improving roads. Address County Commissioners.

Welch, W. Va.—Jail.—McDowell County Commissioners awarded contract to Camden Iron Works, Salem, Va., for additions to new jail at Welch; 40 steel cells to be added and buildings enlarged; contract to approximate \$30,000.

West Palm Beach, Fla.—Business Building.—Anthony Bros. will erect business block.

West Palm Beach, Fla.—Boathouse.—William Disson will erect \$3000 boathouse.

Wilmington, N. C.—Stores, etc.—Jas. F. Woolvin had plans prepared by Burrell H. Stephens, Wilmington, for three-story store, office and lodge structure; 67x83 feet; electric and gas lighting; ordinary construction; cost \$12,000; now receiving bids.

Winston-Salem, N. C.—Store Building.—H. Montague will erect store building; two stories and basement; 25x75 feet; ordinary brick construction; heating and lighting not decided; elevator; architect not engaged.

MUNICIPAL BUILDINGS

Beaufort, S. C.—Town Hall.—City has disposed of \$43,000 bond issue for construction of water-works, electric-light plant and town hall. Address The Mayor.

Benwood, W. Va.—Hosehouse.—City Clerk will receive bids until May 4 for erection of brick hosehouse; contract let as whole; plans can be seen at City Building of Benwood; Louis A. Fisher, architect, Benwood.

Durham, N. C.—Municipal and Theater Building.—City awarded contract to Salmon & Salmon of Durham for erection of municipal building and Academy of Music; plans recently noted prepared by Hook & Rogers, 609 Trust Bldg., Charlotte, N. C. (See "Theaters.")

E. Reno, Okla.—City Hall and Fire Station. City voted \$50,000 bond issue for City Hall and \$20,000 for fire station. Address The Mayor. (Recently mentioned.)

Griffin, Ga.—City Hall.—City voted \$30,000 bond issue for City Hall building recently mentioned. Address The Mayor.

Hackett, Ark.—Jail.—City will erect jail. Address The Mayor.

McKinney, Texas—Fire Station.—City will vote May 31 on issuance of \$20,000 of bonds for erection of fire station and street improvements. Address The Mayor.

Mobile, Ala.—Hospital.—E. E. Ward & Co. of Mobile reported as lowest bidders at \$7000 for erection of wing to city hospital.

St. Albans, W. Va.—City Hall.—City voted \$5000 bond issue for erection of City Hall; will erect two-story concrete structure; steam heat; gas lighting; cost within \$8000; architect not employed; W. S. Jarrett, Mayor.

Tulsa, Okla.—Storage-house.—City voted \$3000 storage-house bonds. T. C. Hughes, City Engineer.

RAILWAY STATIONS

Anniston, Ala.—Louisville & Nashville Railroad, W. H. Courtenay, chief engineer, Louisville, Ky., will, it is reported, remodel union station and erect freight depot at Anniston.

Gainesville, Fla.—Seaboard Air Line Railroad, W. L. Seddon, chief engineer, Portsmouth, Va., has completed plans and specifications for proposed passenger depot at Gainesville.

Little Rock, Ark.—Hospital and Fire Stations.—City is considering issuance of \$50,000 of bonds to erect city hospital, \$50,000 to erect four fire stations and \$35,000 to furnish hospital and equip fire stations; E. A. Kingsley, City Engineer.

Mcinphis, Tenn.—Fire and Police Station.—City has secured authority to issue \$200,000 of bonds for erection of central fire and police station; Heiskell Weatherford, City Engineer.

Mt. Sterling, Ky.—Chesapeake & Ohio Railway, F. I. Cabell, engineer maintenance of way, Richmond, Va., purchased site, 100x400 feet, on which, it is reported, to erect depot; brick and stone; cost \$25,000; umbrella shed, 400 feet long.

Newton, Miss.—Alabama & Vicksburg Railway, A. A. Woods, resident engineer, Vicksburg, Miss., and Mobile, Jackson & Kansas City Railroad, W. F. Owan, general manager, Mobile, Ala., will not erect union station at Newton. This proposition was considered by Railroad Commission, but structure was not ordered built. (Recently reported.)

Oklahoma City, Okla.—Fort Smith & Western Railroad, W. M. Bushnell, general manager, Fort Smith, Ark., reported as having site at Oklahoma City on which to erect depot.

Quanah, Texas—Quanah, Acme & Pacific Railway, F. M. Sands, superintendent, Acme, Texas, reported to erect two-story depot at Quanah, costing \$15,000.

Winchester, Ky.—Lexington & Eastern Railroad awarded contract to George Baker Long, News Bldg., Chattanooga, for erection of \$15,000 brick passenger station.

SCHOOLS

Alva, Okla.—School District No. 1, L. H. Tanner, clerk of board, will have plans prepared by A. A. Crowell, Enid, Okla., for school building recently mentioned; cost \$22,000.

Baltimore, Md.—Friends' School, Park Ave. and Laurens St., awarded contract to J. Henry Miller, 110 Dover St., Baltimore, for erection of gymnasium; one story; 34x88 feet; cost \$7500; plans by C. M. Anderson, 324 N. Charles St., Baltimore.

Bloomington, Texas.—City has declared \$2500 bond issue (recently noted) illegal. Address The Mayor.

Breaux Bridge, La.—Bids addressed to Leo M. Favrot, superintendent, St. Martinville, La., will be received until May 11 for erection of two-story brick school building at Breaux Bridge; certified check for \$400, payable to president of School Board, parish of St. Martin, La.; contractor to state earliest date for completion of work; shall start in 15 days after signing contract; failing to complete work in specified time, he shall pay \$25 daily for each day work remains incomplete after said date; plans and specifications on file at office of Favrot & Livaudais, 839 Gravier St., New Orleans, La. (Recently mentioned.)

Burleson, Texas.—City has voted \$20,000 of bonds for erection of school building. Address The Mayor. (Recently mentioned.)

Catonsville, Md.—Contractors estimating on erection of proposed \$30,000 school building at Catonsville include Henry Nagel, G. Walter Jovell, W. E. Burnham, Builders' Exchange Bldg.; Gladfelter & Chambers, 2072 Woodberry Ave.; W. O. Fowble, 536 Falls Rd.; John Cowan, 106 West Madison St., all of Baltimore, Md.; plans by Wm. A. Ehlers, Catonsville; bids to be received until May 11.

Centralia, Mo.—City awarded contract to Heflin & Holleman, Huntsville, Mo., for erection of school building recently mentioned; pressed brick; metal cornice; slate roof; steam heat and ventilating system; plans by M. F. Bell, Fulton, Mo.; cost \$25,000.

Charleston, W. Va.—Bids received until May 6 for erection of 12-room school building in First ward of Charleston; certified check for \$1000; plans and specifications on file at office of Superintendent of Schools, High School Bldg.; W. O. Daum, secretary Board of Education; building to be of ordinary brick construction; hot-air heat; cost \$50,000.

Chattanooga, Tenn.—Hamilton County Board of Education, W. S. Beck, chairman, care of Prof. J. B. Brown, superintendent, County Courthouse, Chattanooga, will receive proposals until May 21 for erection of three-story brick addition to Central High School at Ridgedale; size, 30x50 feet; gray vitrified brick facing; stone foundation;

composition roof; steam heat; electric lighting; cost about \$5000; also for \$10,000 gymnasium and manual training building on same lot; two stories; basement; red brick composition roof; 100x100 feet; steam heat; electric lighting; shower baths, etc.; plans by Adams & Alsup, James Bldg., Chattanooga. (Recently mentioned.)

Columbia, S. C.—City has had plans prepared by Shand & Lafaye, Columbia, for proposed school building at Olympia Mills, to replace present structure; estimated cost \$9000.

Decatur, Ga.—Donald Fraser School will probably be rebuilt on larger scale; J. G. Patton, chairman of trustees.

Denham Springs, La.—Livingston Parish School Board, H. T. Cornish, president, had plans prepared by W. L. Stevens, Baton Rouge, La., for two-story brick school building; four rooms on each floor, with cloakrooms, etc.; ordinary construction; cost \$8000; bids to be opened May 26.

Fairfield, Va.—City has voted for erection of three school buildings. Address The Mayor.

Fort Defiance, Va.—Augusta Military Academy has had plans prepared by T. J. Collins & Son, Staunton, Va., for school and gymnasium building; two stories and basement; 50x75 feet; concrete construction; fireproof; steam heat; electric lights.

Fort Mill, S. C.—City has voted \$10,000 of bonds for erection of school buildings. Address The Mayor.

Fort Worth, Texas.—City will vote May 8 on \$300,000 bond issue for school improvements. Address The Mayor. (Recently noted.)

Frankfort, Ky.—Colored State Normal School will soon award contract for proposed administration building; cost \$40,000.

Franklin, N. C.—Macon county will vote May 15 on \$12,000 bond issue to erect school building at Franklin. Address County Commissioners.

Gaston, N. C.—Linwood College, Rev. A. T. Lindsay, president, will erect building to cost \$15,000.

Greenfield, Tenn.—Greenfield Training School, recently noted, will erect school building; 60x100 feet; ordinary construction; hot-air heat; electric lights; cost \$12,000; T. G. Hummel, chairman of Building Committee; John West, president Board of Trustees. (See "Machinery Wanted.")

Griffin, Ga.—City voted \$30,000 bond issue for erection of new school building. Address The Mayor. (Recently noted.)

Hellin, Ala.—City has voted bonds to erect high-school building. Address The Mayor.

Hobart, Okla.—City has voted \$70,000 of bonds for erection of two school buildings. Address The Mayor. (Recently mentioned.)

Muskogee, Okla.—St. Joseph's Catholic College will erect \$60,000 school building.

Kempsville, Va.—School Board of Princess Anne county will receive bids until May 7 for erection of school building at Kempsville; plans and specifications on file at office of Rossel Edward Mitchell, 510 Dickson Bldg., Norfolk, Va.

Lagrange, Ga.—City awarded contract to Pike Bros., Lagrange, for erection of proposed eight-room brick-veneered school building; two stories; cost \$6000.

Lawton, Okla.—City awarded contract at \$88,500 to L. Crosby & Son, New York Life Bldg., Kansas City, Mo., for erection of high-school building at Lawton, recently noted, and at \$14,330 to Lewis & Kitchen, Kansas City, Mo., for heating and plumbing; plans by Hair & Smith, Binns Bldg., Oklahoma City, Okla.

Little Rock, Ark.—State Board of Charities contemplates erection of additional building for Deaf-Mute Institute.

Longview, Texns.—City has voted \$40,000 of bonds to erect high school; plans by J. S. Blocher, Longview; cost \$40,000; bids will be accepted.

Lubbock, Texas.—City has voted \$25,000 of bonds for erection of school building; stone, brick or concrete. Address The Mayor.

Martinsburg, W. Va.—Bids will be received until May 14 for erection of 12-room brick and stone school building in Martinsburg; plans and specifications on file at office of W. A. Pitzer, secretary Board of Education.

Montgomery, Ala.—Board of Education, Benjamin J. Baldwin, president, will open bids May 20 for erection of school building recently mentioned; plans by Frank Lockwood, Montgomery; 170x140 feet; four stories; ordinary construction; steam heat; electric lighting; ventilation; manual training department machinery to be installed; cost of building \$90,000. (See "Machinery Wanted")

Oklahoma City, Okla.—Epworth University had plans prepared by Cope & Stewardson, 320 Walnut St., Philadelphia, Pa., for "Girls' Hall" building previously noted; brick and stone fireproof structure; steam heat; electric lighting; cost \$50,000.

Quincy, Fla.—City voted \$10,000 of bonds for erection of school building recently mentioned. Herbert L. Love, Mayor.

Pocahontas, Va.—A. G. Kiser, Tazewell, Va., has contract for erection of high-school building recently mentioned; price, \$21,000; plans by C. L. & W. E. Shuflebarger, Bluefield, W. Va.

Riverside, P. O. Fort Worth, Texas.—City will vote May 18 on \$8000 bond issue to erect school building. Address The Mayor.

Robeline, La.—City will erect \$15,000 high-school building; plans by F. W. Steinman, 214 Junker Bldg., Beaumont, Texas; brick structure; slate roof; steam heat; electric lighting; size 70 $\frac{1}{2}$ x89 $\frac{1}{2}$ feet; cost \$15,000; bids to be opened May 24.

Rotan, Texas.—Bids will be received until May 17 for erection of brick school building at Stamford; 11 rooms; certified check for 5 per cent. amount of bid, payable to President of School Board, Rotan; all bids must be submitted on forms furnished by architect of Secretary of School Board; plans and specifications on file at offices of E. G. Withers, architect, Stamford, Texas, or Secretary School Board, Rotan. (Recently mentioned.)

Selma, Ala.—Bids will be received for erection of high-school building at Selma; certified check for \$25; plans and specifications on file at office of Charles H. Thompson, architect, Selma; J. M. Baker, chairman building committee, City School Board, Selma.

Shandon, P. O. Columbia, S. C.—City awarded contract to McCullough & Rutherford, Columbia, for erection of school building recently mentioned; two stories; brick, with stone trimmings; 65x79 feet; concrete foundation; standing seam tin roof; cost, including heating and lighting, \$9675; plans by Sayre & Baldwin, Anderson, S. C.

Shiro, Texas.—Plans will be received until May 10 for two-story brick school building at Shiro; two rooms on first floor and one room above; J. P. R. Rickard, president School Board.

Stillwater, Okla.—Oklahoma Agricultural and Mechanical College awarded contract to Cook Construction Co., Des Moines, Iowa, for erection of buildings recently noted; plans by W. A. Atherton, Stillwater; boys' dormitory, three stories, 36x132 feet, cost \$25,000; women's building, 76x148 feet, cost \$60,000; vacuum steam heat; electric lighting; freight elevator.

St. Augustine, Fla.—Joseph Geissman, St. Augustine, at \$10,343 is lowest bidder for carpenter and mason work on school building recently mentioned; plans by Robinson & Reidy, St. Augustine.

St. Joseph, Mo.—St. Patrick's Catholic Church will erect parochial school, parish house and church building, to cost \$150,000. Address The Pastor, St. Patrick's Catholic Church.

Tazewell, Va.—City awarded contract to D. J. Phipps, Newport News, Va., for erection of school building.

Washington, D. C.—City awarded contract to Burgess & Parsons, 627 F St. N. W., Washington, for erection of proposed school building on School street, Mt. Pleasant; eight rooms; red brick; terra-cotta trimmings. (Recently mentioned.)

Washington College, Tenn.—Washington and Tusculum College, Charles O. Jones, president, will erect chapel building to cost \$10,000.

Washington, D. C.—City will expend \$60,000 for repairing and remodeling school buildings; Snowden Ashford, 1508 21st St. N. W., Inspector of Buildings.

Waycross, Ga.—Ware county contemplates issuing \$200,000 of bonds for erection of school buildings and jail and for improvements to roads. Address County Commissioners.

Weatherford, Texas.—Bids will be received May 14 for erection of eight-room addition to high-school building; concrete and brick; certified check for \$200, payable to Ed. Armstrong, Weatherford; plans and specifications on file at office of Walter E. Taylor, architect, Continental Bank Bldg., Fort Worth, Texas, or of Secretary of School Board, Weatherford. (Bond issue recently noted.)

West End, P. O. Birmingham, Ala.—City recently noted as having plans prepared by D. O. Whildin, Birmingham, for school building, will erect two-story structure; pressed brick; marble trimmings; reinforced concrete

corridors; vacuum-cleaning system; mechanical heating and ventilating systems; cost \$26,000.

Weston, W. Va.—City has had plans prepared by C. F. Allen, Weston, for proposed school buildings; bond issue will be voted.

West Point, Mass.—Christian Church will erect \$50,000 college in West Point. Mr. LaGrone may be addressed.

THEATERS

Baltimore, Md.—Thomas O'Neill awarded contract to Engineering Contracting Co., 207 American Bldg., to erect moving-picture theater at 30-34 West Lexington street, to be occupied by Greater Wizard Amusement Co.; building will be 45x114 feet; one story; ornamental brick and stone; concrete foundation; cost of erection, \$26,000; plans by Baldwin & Pennington, Professional Bldg., Baltimore. (Recently mentioned.)

Durham, N. C.—City awarded contract to Salmon & Salmon of Durham at \$27,192.91 to erect municipal building and Academy of Music recently mentioned; have steam heat and electric lighting; 72x122 feet; plans by Hook & Rogers, 609 Trust Bldg., Charlotte, N. C.

Marlin, Texas.—J. A. Phipps will erect building; brick; two stories; 36x100 feet; first floor leased to E. Homer Long for electric theater.

Mt. Sterling, Ky.—I. F. Tabb awarded contract for erection of opera-house; first-floor seating capacity, 500, and balcony, 250.

Nashville, Tenn.—W. P. Ready, manager Crescent Theater, will remodel interior of theater and erect new front of Italian marble and white marble to cost \$2000.

Temple, Texas.—James Rudd will erect airdome to seat 1500.

WAREHOUSES

Apex, N. C.—Producers' Warehouse Co. incorporated with \$30,000 capital stock by A. D. Upchurch, Percy J. Olive and others.

Baltimore, Md.—F. Bonhage & Co., 30 Market Place, have had plans prepared and are now receiving bids on erection of warehouse at Frederick and Water streets; brick; three stories, 66x65 feet. Following contractors estimating: R. H. Mason, 324 West Biddle St.; C. L. Stockhausen, National Marine Bank Bldg.; Engineering Contracting Co., American Bldg.; James F. Farley, Franklin Bldg.; Monmonier & Sorrell, 30 Laurens St.; Benjamin F. Bennett, 123 South Howard St., and C. C. Watts, 113 West Hamilton St. (Recently mentioned.)

Baltimore, Md.—Philip Lindenstruth, 204 Gough St. Ext., will erect warehouse at 455 North Front street; three stories; 37x100 feet; mill construction; brick exterior walls; plans by John Freund, Jr., 210 East Lexington St., Baltimore.

Baltimore, Md.—J. Henry Miller, 106-108 Dover St.; Charles L. Stockhausen, National Marine Bank Bldg.; John F. Kunkel, 413 King St.; Thomas B. Stanfield & Son, 109 Clay St.; R. B. Mason, 324 West Biddle St.; Eugene D. Springer, 424 South Charles St., and Henry S. Rippl, 1-7 Clay St., all of Baltimore, have submitted bids on shed to be erected on western half of Pier 2, Pratt street, by Di Giorgio Fruit Co., 18-20 East Pratt St.; structure will be used for protection of merchandise, either received or for shipment; building proper will be one story; 30 feet high, 235 feet long and 70 feet wide; timber framing, covered with slab roof and inclosed with corrugated iron siding; will be provided with sliding doors, placed on continuous running track, on unloading or ship side of structure; plans by John Freund, Jr., 210 East Lexington St., Baltimore. (Recently mentioned.)

Washington, D. C.—City will expend \$60,000 for repairing and remodeling school buildings; Snowden Ashford, 1508 21st St. N. W., Inspector of Buildings.

Franklin, W. Va.—Valley Produce Co. will erect warehouse.

Demopolis, Ala.—Birmingham & Gulf Navigation Co. will erect warehouse.

Franklin, W. Va.—Valley Produce Co. will erect warehouse.

Helena, Ark.—D. T. Hargraves & Co., 314 Cherry St., will rebuild warehouse recently reported burned; one-story; brick; 43x72 feet; gravel roof; cost \$3500.

Kansas City, Mo.—Long Building Realty Co. will erect brick warehouse to cost \$15,000.

Kirbyville, Texas.—N. W. Pratt will erect concrete warehouse; construction begun.

Lake Charles, La.—Geiser Manufacturing Co., branch house, W. Broad St., will erect warehouse and office building for sales department; factory at Waynesboro, Pa.; H. L. Carey, sales manager.

Lynchburg, Va.—Lynchburg Tobacco Warehouse Co. incorporated with \$100,000 capital stock; G. L. Fleming, president; G. H. Nowlin, vice-president; J. F. Pugh, secretary-treasurer.

Memphis, Tenn.—Riechman-Crosby Com-

pany, John Riechman, president, awarded contract to Murch Bros. Construction Co. of Memphis to erect warehouse; three stories and basement; brick; mill construction; cost \$31,000, exclusive of heating, wiring, plumbing and elevator. (Previously mentioned.)

Memphis, Tenn.—Memphis Sash & Door Co., J. A. McAlister, president, contemplates erection of warehouse; will not build this year.

Miami, Fla.—James P. McQuade reported to erect warehouse, with slips for accommodation of ships. (See "Ice and Cold-storage Plants.")

Pritchett, Texas.—Upshur County Farmers' Union will erect cotton warehouse.

San Antonio, Texas.—Wells Fargo Express Co., Houston, Texas, will erect depot; stone; one story; 50x70 feet.

Texas City, Texas.—The Texas City Co., A. B. Wolvin, president, Duluth, Minn., has begun construction on improvements; will expend \$1,000,000 within next 12 months and an additional \$1,000,000 during 1910; proposes to build seven warehouses; west of present cotton warehouse (1200 feet long) will build two additional warehouses, each with floor space of 46,500 square feet; nearby will build three warehouses, one with floor space of 40,800 feet and two with floor space of 43,500 feet each; width of buildings 100 feet each; concrete foundation and floor; steel superstructure; asbestos siding and roof; sprinkler system for fire protection; also connected with water hydrants on every 1000 square feet of space, each hydrant having extra pressure to cover 3000 square feet; protection fire walls constructed every 1000 feet; electrically operated moving platforms for conveying freight, probably several hundred feet long; on south side will build fireproof warehouse with cattle chutes on the end, and on north side a cooling station with capacity of 10,000 tons; later will build grain elevator of steel and tile construction, with circular tile storage tanks; elevator-house will have capacity of 500,000 bushels of grain and storage tanks for 500,000 bushels; will provide power station, stock yards, additional trackage—probably 11 miles; spur railroads to industrial plants, etc.; will enlarge present pier, increasing length to 1200 feet, width being 500 feet; outer end will be covered with shed 500 feet wide and 600 feet long; wharves and shed to have concrete foundation, with superstructure of steel and asbestos; masonry contract awarded to William Moore of Texas City; steel contract awarded to American Bridge Co., Pittsburgh, Pa.; latter also has warehouse contract. The Texas City Company will also construct sewerage system for entire site, build waterworks system to include elevated tank of 100,000 gallons capacity and pumping station at terminal depot shops; will drill two additional artesian wells and probably provide plant for electric lighting; will erect three-story office building, 60x110 feet, etc. In telegram mentioning these improvements the company states H. B. Moore is in charge of construction.

Tulsa, Okla.—Ratcliff-Sanders Company will erect warehouse; two stories and basement; reinforced concrete; cost \$22,000.

Washington, Ga.—Company has been organized with J. R. Dyson president, W. J. Adams vice-president and T. B. Sale secretary, treasurer and manager; will erect brick fireproof cotton warehouse.

RAILROAD CONSTRUCTION

RAILWAYS

Altus, Okla.—Grading crews are reported at work on the extension of the Wichita Falls & Northwestern Railway from Frederick to Altus. A bonus of \$45,000 was raised by Altus. Frank Kell is vice-president and general manager at Wichita Falls, Texas.

Annapolis, Md.—The Washington, Baltimore & Annapolis Electric Railway Co. is considering a proposition to extend its line from Annapolis to Eastport, Bay Ridge and Arundel-on-the-Bay, about five miles. J. N. Shanahan is general manager at Baltimore, Md.

Ardmore, Okla.—An officer of the Rock Island system informs the Manufacturers' Record that the company does not intend to soon construct a line between Ardmore and Waurika, which was located several years ago. This denies recent press report.

Beaumont, Texas.—President A. J. Davidson of the Frisco system is quoted as saying that extensive improvement of freight and passenger terminals at Beaumont is contemplated but that it has not yet been decided how much will be done; M. C. Byers is chief engineer at St. Louis, Mo.

Cairo, Ga.—The Pelham & Havana Railroad Co. is reported to have completed two miles of track and is operating a locomotive. Construction is being pushed to Havana, Fla.

Clarksburg, W. Va.—Rumored that the narrow-gauge railway from Walkersville to Ireland will be converted to standard gauge and extended to Duffy. W. E. Mich & Sons are the owners.

Covington, La.—The extension of the New Orleans Great Northern Railroad has been completed to Elton, four miles from Jackson, Miss., which will be entered from there over the Illinois Central, and the first train has been run over the route, which, it is officially announced, will be opened for regular service by July 1.

Dallas, Texas.—B. L. Winchell, president of the Rock Island system, is reported as saying that freight terminals costing several hundred thousand dollars will be built at Dallas, to be used by the Rock Island and Frisco systems. It is expected to request bids in 30 days. J. B. Berry is chief engineer at Chicago.

Davis, W. Va.—The Condon-Lane Boom & Lumber Co. is reported surveying for a railroad extension in Randolph county down Big Run and up North Fork in Pendleton county to Laurel and Straight forks to develop timber land.

Daytona, Fla.—Franchises for an electric railway have been granted in Daytona Beach and Seabreeze, and notice is given that application will be made for a franchise in Daytona. The Mayor may be able to give information.

Elizabeth City, N. C.—The Elizabeth City & Albemarle Railway Co., which proposes to build an electric line, as heretofore reported, has elected directors as follows: C. E. Kramer, president; E. V. Davenport, vice-president; H. G. Kramer, secretary and treasurer; D. G. Wilson, C. H. Robinson, J. B. Flora and Elisha Lister.

Fairmont, W. Va.—Reported that Hamilton & Huffman have been given a contract by the Fairmont & Clarksburg Traction Co. to grade an extension from East Park to the Fair Grounds.

Fayetteville, W. Va.—The incorporators who recently chartered the Fayette Railway Co. have taken out a new charter in place of it to incorporate the Fayette County Traction Co., capital \$75,000. An electric railway is to be built from Fayette Station to Fayetteville, three miles, and a preliminary survey has been made. The directors are: President, L. D. Dacy of Richmond, Va.; vice-president, E. G. Blume; treasurer, R. D. Vest; general superintendent, G. E. Nestor, all of Fayette, W. Va.; D. M. White, J. S. Hatcher and M. R. Bates of Richmond, Va.; John Reese of Fayette, W. Va., and J. M. Trevette of Richmond, Va. J. E. Tucker of Petersburg, Va., is secretary; Phillip Conrad is engineer.

Franklin, Ga.—Charter has been granted to the Western of Georgia Railway Co., capital \$500,000, to build a line 60 miles long connecting with the Atlanta, Birmingham & Atlantic Railway at Aberdeen, Ga., and running thence westerly to Newnan and Franklin to a point on the State boundary; headquarters at Newnan. The incorporators are John W. Daniel, Hope H. Lane, Ben H. Tonkyns, R. B. Mooty, R. M. Lifford, J. W. Ray, Robert C. Crane, James R. Daniel, W. B. Taylor, W. T. Goodson, A. W. Reeves, Frank R. Lofton, P. T. McCutcheon, Rao Hearn, G. A. Adams and B. D. Whittaker of Franklin; W. D. Ridley, L. F. Davis of Ridley, Heard county; W. A. Brannon of Moreland, Coweta county; B. T. Thompson, L. N. Orr, Sr., Charles C. Parrott, H. C. Arnold, Sr., I. P. Brandley, J. J. Keith and W. C. Wright of Newnan, Ga.

Franklin, Tenn.—Reported that C. H. Walker of Nashville has been awarded the contract for the steel bridge and trestle work on the Middle Tennessee Railroad from Franklin to Leatherwood, which requires from 25 to 30 structures.

Fredericksburg, Texas.—J. P. Nelson, railroad contractor, of San Antonio, it is reported, contemplates building a railroad from Fredericksburg to a point on the San Antonio & Aransas Pass Railway near the Guadalupe river, and thence to the north line of Gillespie county. It may also be extended to Mason or Llano, and probably Brownwood. Temple D. Smith of Fredericksburg and others are reported looking after the financing.

Galveston, Texas.—Official to the Manufacturers' Record: The Galveston-Houston Electric Railway Co. is the title of the company which will build the interurban railway between Galveston and Houston, 45 miles, from city limits to city limits. Private right of way will be used for substantially the whole

way. The Stone & Webster Engineering Corporation of Boston will have charge of the construction. M. M. Phinney is district manager.

Henderson, Texas.—Reported that the Timpson & Henderson Railroad has completed six miles of permanent survey from Pinehill toward Henderson and grading is also being pushed. A movement is under way to secure a continuation of the line from Henderson to Canton, Tyler and Dallas. W. G. Ragley of Timpson, Texas, is president.

Hickory, N. C.—Official to the Manufacturers' Record: The Hickory Railway will not be ready to consider construction until the Water-Power-Electric Company of Hickory, N. C., has been financed for construction and quite ready for operation. It is hoped to immediately float the securities. Col. M. E. Thornton of Hickory is president and may be addressed.

Huntington, W. Va.—The Cabell-Lincoln Rapid Transit Co. Huntington, has been chartered to operate and control motor cars for general transfer purposes; capital \$10,000. The incorporators are S. G. Griffith, L. H. Hammack, S. H. Bowman, H. S. Byrer and J. T. Calvert, all of Huntington.

Joplin, Mo.—The Joplin & Pittsburg Railroad Co., it is reported, will build a line from Joplin to Neosho, Mo.—Joseph Helm is president and D. L. Robinson, assistant secretary and treasurer, both at Kansas City, Mo.

Kansas City, Mo.—The Manufacturers' Record is informed that the Interstate Railway Co., incorporated and organized to build an electric interurban railway between Kansas City and St. Joseph, Mo., has secured about 80 per cent. of the right of way and has instituted injunction proceedings to protect its rights. It has also begun condemnation proceedings and is preparing to begin construction of a standard-gauge modern electric railroad with maximum grade seven-tenths of 1 per cent. and maximum curve three degrees. S. P. Martin is secretary, 735 New York Life Building, Kansas City, Mo.

Llano, Texas.—F. R. Wheeler of Llano is reported interested with Chicago capitalists to build a railroad from Llano to Fredericksburg, Texas.

Longview, Texas.—Concerning the report that the Santa Fe Railway had made a survey between Longview and the Red River, an officer informs the Manufacturers' Record that it is not contemplated at this time to do any construction north of Longview.

Louisville, Ky.—Official to the Manufacturers' Record: The Cincinnati, Louisville, Lexington & Mayesville Traction Co., capital \$1,000,000 proposes to build 250 miles of line connecting the four cities named, all but Cincinnati being in Kentucky. W. T. S. Blackburn of Dry Ridge, Ky., is president.

Madison, W. Va.—Reported that Isaac T. Mann and others are interested in a plan to build an electric railway from Ronceverte, W. Va., to Rich Creek via Peterstown, Sweet Springs and Union.

Nashville, Tenn.—The Nashville Interurban Railway is reported to have begun regular service on its line just completed between Nashville and Franklin, Tenn., 17 miles. H. H. Mayberry is president.

Oklahoma City, Okla.—John W. Gates of Port Arthur is reported to have bought a terminal site in Oklahoma City and proposes to build a railroad from the Kansas City Southern northwest through Oklahoma to connect with the Kansas City, Mexico & Orient Railway. A dispatch from Port Arthur quotes him as saying the line will extend from Texarkana to the Cimarron River, 300 miles.

Petersburg, W. Va.—M. E. Ailes of Washington, D. C.; J. H. Small, also of Washington, and others are reported interested with John J. Cornwell of Romney, W. Va., in the proposed Hampshire Southern Railroad, which is to run from Romney via Moorfield to Petersburg, about 35 miles.

Pine Bluff, Ark.—The Pine Bluff & Southwestern Railroad Co. has been chartered to build a line from a point five miles west of Georgetown, on the Missouri & North Arkansas Railroad, through Jefferson, Lonoke, Prairie and White counties, 65 miles; capital, \$1,600,000. The incorporators are P. P. Byrd, S. C. Alexander, J. F. Rutherford, W. H. Westbrook, D. C. Bell, Fred Fox, Edgar Brewster and J. H. Walker, all of Pine Bluff, Ark.

Pine Bluff, Ark.—Survey is reported begun for the location of the Pine Bluff & Little Rock Transit Co.'s proposed line from Little Rock to Pine Bluff, Wilmar and White Station, Ark. J. E. Seymour of Pine Bluff is vice-president.

Polar Bluff, Mo.—G. W. Tucker of Cairo, Ill., is reported working on a plan to build

an electric railway from Cairo to Poplar Bluff, Mo.

Roanoke, Va.—The Manufacturers' Record is officially informed that the Rustin Railroad Co., recently chartered, is for a short industrial narrow-gauge railroad six miles long, which is being built to develop iron-ore property in Pulaski county, Virginia. John B. Newton, vice-president and general manager of the Virginia Iron, Coal & Coke Co., Roanoke, Va., and others are interested.

Rockdale, Texas.—J. F. Coffield of Rockdale is quoted as confirming the report that he and others are promoting a plan to build a standard gauge electric railway from Rockdale to Florence, Texas, 60 miles. H. C. Meyer of Rockdale is president of the Rockdale-Florence Interurban Railway Co. Directors were elected as follows: H. C. Meyer, John Hicks, J. F. Coffield, Jr., H. Lockwood, Leonard Isaacs, W. L. Baird and W. M. Wells. The advisory board is composed of R. H. Hicks, J. F. Coffield, Sr., L. P. Sessions, Judge J. S. Perry and B. Lowenstein.

Ruskin, Fla.—The Seaboard Air Line, it is reported, is preparing to build a branch from Wimauma, on the Palmetto Branch, to Ruskin. W. L. Seddon is chief engineer at Portsmouth, Va.

Savannah, Ga.—Reported that T. D. Heyward and State Senator Nels Christensen of Beaufort, S. C., are interested in a plan to build an electric railway to connect Savannah with Charleston, S. C. A conference has been held with Savannah city officers.

Stratford, Texas.—The Stratford Commercial Club is reported to be pushing a plan to secure a new railroad north and south through Sherman, Moore and Potter counties and thence to connections in either Kansas or Colorado, the line to be called the Amarillo, Stratford & Northern. Eugene C. Gordon is also reported interested.

Stuttgart, Ark.—The Business Men's League has been organized and will, it is reported, work on a plan for a new railroad 20 miles long from Stuttgart to a connection with the Rock Island system. G. W. Fagan is president and John I. Ingram secretary.

Stamford, Texas.—The Stamford Street Railway Co. will, it is reported, begin construction in the early summer on a five-mile street railway, locally financed. L. M. MacArthur of Stamford is chief engineer.

Tulsa, Okla.—The Tulsa Street Railway Co. is reported to be building some extensions.

When sufficient of the survey is finished, he says, "the contract is let to sound and reliable underwriters to furnish \$4,000,000 as needed by the construction company on the first two divisions. The second two divisions, from Greenville and from Rutherfordton to the sea, are embodied in the same contracts. Terminals are proposed at Southport, N. C., and Port Royal, S. C. It is an entirely independent proposition."

Wiggins, Miss.—The Finkbine Lumber Co. is reported building a 12-mile extension to its railroad.

STREET RAILWAYS

Eureka Springs, Ark.—Reported that the Valley Improvement Co. has been incorporated and is seeking a franchise for a street railway from Eureka Springs to Sanitarium Lake. Chicago capitalists are said to be interested. It has a South Dakota charter.

Greenville, Miss.—The Delta Electric Light, Power & Manufacturing Co. is reported building 1½ miles of additional track, for which material has been purchased.

Lynchburg, Va.—The People's Improvement Co. of Lynchburg, which proposes to build a street railway, has been chartered with capital from \$10,000 to \$25,000; R. J. Hughes, president; R. C. Blackford, secretary and treasurer, and A. D. Apperson, all of Lynchburg, are incorporators.

Spartanburg, S. C.—The Spartanburg Electric Co., it is reported, contemplates extending from East Main street to Rock Cliff Park. F. H. Knox is general manager.

Stamford, Texas.—The Stamford Street Railway Co. will, it is reported, begin construction in the early summer on a five-mile street railway, locally financed. L. M. MacArthur of Stamford is chief engineer.

Tulsa, Okla.—The Tulsa Street Railway Co. is reported to be building some extensions.

MACHINERY, PROPOSALS AND SUPPLIES WANTED

Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The Manufacturers' Record has received during the week the following particulars as to machinery that is wanted.

Air Compressor.—Pfannmueller Engineering Co., 1002 First National Bank Bldg., Chicago, Ill., wants 2400-foot, two-stage duplex, either compound or simple, steam-driven air compressor for 100 pounds air; also 4000 to 5000-foot compound, steam, single-stage air compressor for 40 or 50 pounds pressure; both second-hand.

Asphalt Plant.—See "Mixing Plant."

Banking Supplies.—See "Furniture and Fixtures."

Barrels.—T. H. Johnston & Co., Birmingham, Ala., wants prices on lime barrels.

Bell.—Lawrence McRae, Rhode Island Co., Spray, N. C., wants second-hand church bell. State weight, etc.

Boiler.—J. A. Kaufman Company, Lafayette, Ga., wants water-tube boiler suitable for motor-car business.

Boiler.—Hale & Bitting, 425 James Bldg., Chattanooga, Tenn., want prices on 80-horse-power boiler.

Boiler.—A. E. Lowe, Box 60, San Antonio, Texas, wants prices on boiler for laundry.

Boiler.—Ashcraft Cotton Mills, Florence, Ala., wants prices on 60-horse-power boiler; new or second-hand.

Bottle-seal Machinery.—J. M. Loveless, 197 South Pryor St., Atlanta, Ga., wants addresses of makers of machinery for manufacturing bottle crowns and for placing corks in crowns.

Box Machinery.—Pass Lumber & Manufacturing Co., Pass Christian, Miss., wants prices on box-making machinery.

Brick Machinery.—Charles E. Tips, Seguin, Texas, wants to correspond with manufacturers of vitrified-brick machinery.

Bridge Construction.—Andrew L. Roland, county judge; J. E. Chamberlain and W. S. Hughes, Bridge Commissioners, Malvern, Ark., will award contract May 27 for con-

struction of two steel bridges over Ouachita River at Green's Ferry and Grigsby's Ford; former to consist of one main span, 160 feet long, substructure tubular piers 60 inches in diameter, 38 feet long, with two end spans of 100 feet each, to be supported by concrete abutments; one roadway 16 feet wide; total length of bridge, 360 feet; contractor to furnish all material; certified check, \$1000; bridge at Grigsby's Ford to be according to same plan and specifications, except end spans are to be 110 feet long each.

Broom Machinery.—W. T. McNulty, secretary Board of Trade, Childress, Texas, wants data and prices on broom machinery.

Broom Machinery.—P. Beníquez, Arva, Venezuela, wants prices on machinery for wiring and pressing brooms; uses native bass for broom material.

Bucket Machinery, etc.—Pass Lumber & Manufacturing Co., Pass Christian, Miss., wants prices on bucket and pail machinery.

Building Materials, etc.—Robert A. Morissette, 304 North Meadow St., Richmond, Va., wants catalogues and samples of materials (including hardware) of interest to architects.

Building Materials.—Statesville Plaster & Cement Co., Statesville, N. C., wants to correspond with manufacturers of building materials relative to taking agencies.

Building Materials.—J. F. Woodward, secretary church building committee, Newport, Tenn., wants prices on building materials for \$10,000 concrete, brick and stone edifice.

Calcium Carbide.—Bids will be received at Chief Quartermaster's office, Atlanta, Ga., until May 31 for furnishing and delivering at Fort Oglethorpe, Ga., 1800 tons of calcium carbide during fiscal year commencing July 1, 1909; blank forms of proposals and further information furnished on application; G. G. Bailey, Major and Chief Quartermaster.

Cannery.—E. T. Milbourn, Chester, Pa., wants data on home outfit to can fruit and vegetables.

Cannery.—A. L. Luke, Wynnewood, Okla., wants data and prices on canning equipment.

Canning and Preserving Equipment.—Campbell Fruit Preserving Co., Campbel, La., wants prices on boilers or preserving kettles, soldering equipment and all preserving materials; also on fruit jars and cans, jelly glasses, labels, etc.

Canning Machinery.—Wild Bros. Hardware Co., Evergreen, Ala., wants agency for canning outfit for home use.

Cans.—Sanitation Supplies Co., P. O. Box 262, Charlotte, N. C., wants heavy trash cans, with legs and hinged top, for street use.

Cars.—Eastern Railway Supply Co., 413 American Bldg., Baltimore, Md., wants second-hand baggage car, 50 feet long; also 16 four-yard 36-inch-gauge dump cars.

Causeway Construction.—Bids will be received at office of John M. Murch, county auditor, Galveston, Texas, until June 25 for construction of causeway across Galveston Bay between Galveston Island and Virgin Point; proposals will be received for causeway in its entirety and for any of three sections—arch bridge, lift bridge and roadway; entire causeway will be 10,642 feet long; arch bridge, 242 feet long; lift bridge will have clear span of 100 feet, and roadway will be 8170 feet long; contractors bidding for entire work to divide bids into three parts mentioned. Plans and specifications may be seen and forms of proposal and contract obtained at offices of engineer or auditor of Galveston county; plans and specifications are also on file at offices of chief engineer of G. C. & S. F. Railway, Galveston; bridge engineer of G. H. & S. A. Railway, Houston, Texas; bridge engineer of A. T. & S. F. Railway, Chicago, Ill.; Stone & Webster, Boston, Mass., and Concrete-Steel Engineering Co., Park Row Bldg., New York; copies of plans and specifications may be obtained from Concrete-Steel Engineering Co. upon deposit of \$20; certified check for 3 per cent. of bid.

Cement-block Machinery.—S. J. Murphy & Co., Bradenton, Fla., want catalogues and prices of cement-block machinery.

Cement Machinery.—Southwestern Development Co., C. B. Blake, secretary, Weatherford, Okla., wants proposals for Portland cement machinery; 1000 barrels daily.

Clocks.—Benjamin J. Baldwin, president Board of Education, Montgomery, Ala., wants prices on electric alarm clocks.

Coal and Coke.—Mascot Stove Manufacturing Co., D. C. Jones, general manager, Dalton, Ga., wants prices on coal and coke.

Comfort Machinery.—Joppa Mattress Co., S. J. Beauchamp, president, Little Rock, Ark., will receive proposals on machinery for making comforts.

Concrete Mixer.—Joseph Krischke, Jr.,

Brownwood, Texas, wants concrete-mixing machinery.

Concrete Mixers.—Innis-Graham Construction Co., Fort Worth, Texas, wants prices on concrete mixers.

Contractors' Machinery.—W. Shedd Paxton, Calcutta, India, wants data, prices and discounts on machinery for grading, excavating, dredging, etc.

Cotton Gin.—W. L. Abernathy, Fort Lawn, S. C., wants prices on machinery for six-stall gin; electric power.

Cotton Gin.—Ashcraft Cotton Mills, Florence, Ala., wants 3 7/8-ton gin outfit complete excepting press; for use Barton Gin Co., Barton, Ala.

Cotton Gin.—Paradise Gin Co., T. H. Brackett, secretary, Paradise, Texas, has machinery, etc., for sale. (Recently incorrectly noted to want cotton-gin outfit.)

Crusher.—Hale & Bitting, 425 James Bldg., Chattanooga, Tenn., want catalogues and prices on gyratory rock crusher.

Curtain Walls.—Fort Screenen, Ga., Sealed proposals will be received May 8 for construction of curtain walls under eight buildings; information on application. Address Quartermaster.

Door-mat Machinery.—See "Fiber Machinery."

Dredging.—U. S. Engineer Office, Room 309 Custom-house, Baltimore, Md.—Sealed proposals for dredging in Patapsco River, Maryland, will be received until June 1. Information on application. W. E. Craighill, Major, Engineers.

Dredging.—Bids will be received at Moultrieville, S. C., until May 31 for dredging channel from Quartermaster's wharf, Fort Moultrie, S. C., to Charleston Harbor, S. C.; information on application; certified check for \$25 will be required to secure plans, etc. Address Constructing Quartermaster.

Driers.—Okura & Co., 11 Broadway, New York, want catalogues of lumber driers, with export price-lists and discount sheets.

Dumbwaiter.—Keenan & Weiss, 418 Hibernia Bldg., New Orleans, La., want catalogues and prices on dumbwaiter.

Electric Dynamo.—Potomac Milling & Ice Co., Keyser, W. Va., S. N. Nevins, manager, wants 125-light dynamo.

Electric-light Plant.—W. E. Myer, Carthage Packet Co., Carthage, Tenn., wants electric-light plant as follows: Five-kilowatt machine; 14-inch 3000-candle-power searchlight; 50 incandescent lights, 16 candle-power; switchboard with ammeter and voltmeter, generator switch; 3½x4-inch vertical reciprocating engine; to be installed on boat at Jefferson, Ind., and pass Government and insurance inspection.

Electric Machinery.—G. W. Ford, Louisville, N. C., wants prices on machinery for development of water-power and transmission of electricity.

Elevator.—Sayre Iron Works, Phoebe, Va., wants second-hand elevator for raising pig iron and coke to charging platform; 15-foot lift; 2000 pounds capacity.

Elevator.—J. C. Staples, Harrisonburg, Va., wants prices on hand-power freight elevator to carry 1500 pounds.

Elevator.—Keenan & Weiss, 418 Hibernia Bldg., New Orleans, La., want catalogues, specifications and prices on elevator (fast automatic passenger and freight combined).

Elevator.—Potomac Milling & Ice Co., Keyser, W. Va., S. N. Nevins, manager, wants freight elevator, 30,000 pounds capacity.

Engine.—Cowpens Cotton Oil Co., Cowpens, S. C., in market for second-hand Corliss engine; 50 to 100 horse-power; good condition.

Engine.—Ashcraft Cotton Mills, Florence, Ala., wants prices on new or second-hand 30-horse-power engine.

Engine.—Hale & Bitting, 425 James Bldg., Chattanooga, Tenn., want prices on 60-horse-power engine.

Engine and Boiler.—Kothario, Sutari & Co., 19 Churchgate St., Fort, Bombay, India, want specifications and prices on 150-horse-power automatic engine and boiler. (See "Oil Mill.")

Fiber Machinery.—Manufacturer, care of Manufacturers' Record, Baltimore, Md., wants machine for making door mats from coco fiber.

Flour Mill.—Summers & King, Olin, N. C., want roller-mill outfit.

Flour Mill.—Manuel Rebassa, Apartado 684, Havana, Cuba, wants data on flour mill of 1000 to 1500 sacks capacity daily.

Foundry Supplies.—Mascot Stove Manufacturing Co., D. C. Jones, general manager, Dalton, Ga., wants catalogues of stove-foundry supplies.

Furniture and Fixtures.—Mullens Banking & Trust Co., M. F. Matheny, president, Beckley, W. Va., wants fixtures, furniture and banking supplies; floor plans and specifications with architect, Chas. G. Rabenstein, Charleston, W. Va.

Gas Engine.—Potomac Milling & Ice Co., Keyser, W. Va., S. N. Nevins, manager, wants 25-horse-power gas engine.

Gas Engines.—W. Shedd Paxton, Calcutta, India, wants data, prices and discounts on gas engines and suction gas plants, 4 to 1000 horse-power.

Heating Plant.—John West, president board of trustees, Greenfield Training School, Greenfield, Tenn., wants prices on heating plant for school building.

Heating Plant.—Benjamin J. Baldwin, president Board of Education, Montgomery, Ala., wants prices on heating plant for \$30,000 school building.

Heating Plant.—F. F. Andrews, 115 West 9th St., Chattanooga, Tenn., wants bids on heating plant for \$3000 dwelling.

Heating Plant.—State School for Blind and Deaf, John E. Ray, principal, Raleigh, N. C., wants bids on central plant for heating seven buildings; forced hot-water system; bidders to furnish plans and specifications; allowance to be made for material in present steam-heating plant.

Holisting Engine.—Morrison Machinery & Supply Co., Richmond, Va., wants second-hand 10-horse-power single-drum holisting engine (without boiler); state make and how long used.

Holisting Engine.—Eastern Railway Supply Co., 413 American Bldg., Baltimore, Md., wants double-cylinder double-drum holisting engine.

Holisting Machinery.—Innis-Graham Construction Co., Fort Worth, Texas, wants prices on holisting machinery.

Holisting Machinery.—Joseph Krischke, Jr., Brownwood, Texas, wants holisting machinery.

Ice-cream Machinery.—W. F. Bryant, secretary Montgomery Ice Cream, Dairy & Trading Co., Montgomery, Ala., wants prices on ice-cream machinery.

Ice Machinery.—A. L. Luke, Wynnewood, Okla., wants data and prices on equipment for ice plant.

Iron.—Mascot Stove Manufacturing Co., D. C. Jones, general manager, Dalton, Ga., wants prices on pig iron.

Iron Fence.—Baltimore (Md.) Board of Awards, care City Register, City Hall, will receive bids until May 12 for furnishing wrought-iron picket fence, in accordance with plans and specifications of Board of Park Commissioners, which can be obtained at office of board, at Madison-avenue entrance to Druid Hill Park; certified check, \$20. William S. Manning, general superintendent.

Knitting Machines.—Ole Kravik, Jr., Marquette, Minn., wants quotations on knitting machines.

Knitting Machinery.—F. H. Cochran, Greenwood, S. C., wants addresses of manufacturers of knitting machinery.

Laundry Machinery.—G. S. Sexton, Wytheville, Va., wants information on steam-laundry machinery.

Levee Work.—Board of Mississippi Levee Commissioners, Greenville, Miss., will receive bids until May 17 for construction of \$50,000 cubic yards of embankment in Mississippi levee district. Maps, profiles, specifications and information can be obtained at office of C. H. West of Greenville, chief engineer; bids accompanied by forfeit of 3 per cent.

Lime Plant.—T. H. Johnston & Co., Birmingham, Ala., wants to correspond with manufacturers of machinery to equip lime plant.

Locomotive.—Eastern Railway Supply Co., 413 American Bldg., Baltimore, Md., wants 9x14 26-inch-gauge dinkey engine.

Locomotive.—J. F. Donahoo Company, Birmingham, Ala., wants 36-inch-gauge locomotive (Mogul preferred). Give location, specifications, date of delivery, etc.

Manual-training Equipment.—Benjamin J. Baldwin, president Board of Education, Montgomery, Ala., wants prices on manual-training equipment.

Mattress Machinery.—Joppa Mattress Co., S. J. Beauchamp, president, Little Rock, Ark., will receive proposals on felting machinery.

Metal Shelving—Treasury Department, Office of Supervising Architect, James Knox Taylor, Washington, D. C.—Sealed proposals will be received until May 13 for metal vault shelving for extension to U. S. postoffice and courthouse, Knoxville, Tenn., in accordance

with drawing and specification, copies of which may be had at this office or at office of superintendent of construction at building, at discretion of architect.

Mining Machinery.—W. Shedd Paxton, Calcutta, India, wants data, prices and discounts on mining machinery and supplies.

Mixing Plant.—Board of Public Works, Wright Smith, chief engineer, Mobile, Ala., wants small asphalt mixing repair plant; capacity, 25 yards daily.

Monument.—J. W. Young, J. E. Hughes and A. T. Roane of W. R. Barkdale Camp, Confederate Veterans, Grenada, Miss., will receive bids for plans, specifications and prices until July 1 for erection of Confederate monument to memory of Confederate soldiers of Grenada county; cost not to exceed \$4000.

Naval Supplies.—Proposals will be received at Bureau of Supplies and Accounts, Navy Department, Washington, D. C., until May 11 to furnish at Navy-yard, Washington, D. C., quantity of naval supplies: Schedule 1201, steel; Schedule 1202, brass; Schedule 1203, rifling liners, coil springs. Applications for proposals should designate schedules desired by number; blank proposals furnished upon application to bureau; E. B. Rogers, Paymaster-General, U. S. N.

Oil Burners.—Southwestern Development Co., C. B. Blake, secretary, Weatherford, Okla., wants to correspond with manufacturers of oil burners for rotary kilns.

Oil Mill.—Kothario, Sutari & Co., 19 Churchgate St., Fort, Bombay, India, want data and estimates on 40-ton cotton-oil mill; on machinery to refine five tons crude oil to prime summer yellow; on refrigerating machinery to produce stearine; on 150-horse-power automatic engine and boiler.

Oil-mill Machinery.—W. L. Abernathy, Fort Lawn, S. C., wants prices on cottonseed-oil-mill machinery, including six filters, and seed cleaners for seed before storage and between storage and filters.

Overall Machinery, etc.—Prospective, Box 13, Seneca, S. C., wants data and prices on machinery for manufacture of overalls, shirts, etc.

Paving.—J. M. Gannaway, City Clerk, McAlester, Okla., will receive bids until May 24 for construction of vitrified-block pavement, cement curb and gutter, approximately as follows: 29,323 square yards block pavement; 10,838 linear feet combined curb and gutter; 1284 linear feet 12-inch curbing; 10,641 cubic yards excavation; engineer's estimate, \$78,458.90; certified check for \$1000; J. Phelan, City Engineer.

Paving.—Office of Commissioners D. C., Washington. Sealed proposals will be received until May 15 for laying asphalt-block pavements; also, until same date, for paving various streets and avenues with sheet asphalt. Forms of proposals, specifications and necessary information may be obtained from chief clerk, Engineering Department, Room 427 District Bldg.; Henry B. F. MacFarland, Henry L. West, William V. Judson, Commissioners D. C.

Paving.—Board of Bond Trustees, R. M. Bushnell, chairman, Pensacola, Fla., will receive bids until June 1 for grading, paving and curbing certain streets; work consists of 170,700 square yards of clay or shale blocks, sheet asphalt, bitulithic, wood block or macadam pavement and 115,950 linear feet of concrete curb; certified check, \$5000; specifications and blank proposal forms can be obtained from Mr. Bushnell or T. Chatlley Hatton, chief engineer, Wilmington, Del., and Pensacola, and full set of plans can be seen at latter's office, either at Wilmington or Pensacola.

Pipe Organ.—Albert A. Small, 9 East 2d St., Tulsa, Okla., wants prices on \$5000 pipe organ for church.

Plumbing.—John West, president board of trustees, Greenfield Training School, Greenfield, Tenn., wants prices on plumbing for school building.

Producer-gas Apparatus.—Southwestern Development Co., C. B. Blake, secretary, Weatherford, Okla., wants to correspond with manufacturers of soft-coal producer-gas apparatus.

Pump.—Lawrence McRae, Rhode Island Company, Spray, N. C., wants second-hand duplex boiler-feed pump, 6x4x6 or larger.

Pump.—Potomac Milling & Ice Co., Keyser, W. Va., S. N. Nevins, manager, wants deep-well pump, 100 feet; power driven.

Pump.—O. W. Hammond, 123 8th St. N. W., Washington, D. C., wants pump to dredge sand from water; also rotary sand and gravel screen.

Rails.—Eastern Railway Supply Co., 413 American Bldg., Baltimore, Md., wants 30 to 35-pound relaying rails.

Rails.—J. F. Donahoo Company, Birmingham, Ala., wants 800 tons 56 to 60-pound, 400 tons 30 to 40-pound and 500 tons 20 to 30-pound rails. Give location, specifications, date of delivery, etc.

Road Construction.—J. W. Duncan, president Road Committee of Scott county, Georgetown, Ky., will receive bids until May 15 for grading and macadamizing Craig road, being about one and one-half miles long; specifications on file at residence of Mr. Duncan; John E. Wayis, secretary of committee.

Road Construction.—Carolina Heights Boulevard Association (W. B. Brigham, president, and W. T. Ilite, secretary), 934 Walker St., Augusta, Ga., will receive bids until May 10 for construction of Carolina Heights boulevard, leading from Center-street bridge; profiles, etc., can be seen at W. B. Brigham & Son's office, 934 Walker street.

Sand Screens.—See "Pump."

Screens.—Hale & Blitting, 425 James Bldg., Chattanooga, Tenn., want catalogues and prices on screens.

Seats.—John West, president of board of trustees Greenfield Training School, Greenfield, Tenn., wants prices on seats for school building.

Sewer Construction.—See "Water and Sewer System."

Sewer Construction.—Commissioners of Sewerage (W. C. Nones, chairman, and Chas. P. Weaver, secretary-treasurer), Equitable Bldg., Louisville, Ky., will receive bids until May 21 for construction of Section "A" of northeastern trunk sewer and Section "A" of Beargrass drain improvement, contract No. 36 of comprehensive system of sewerage; work will consist mainly of building double concrete sewer 5640 feet long, sizes 48 and 60 inches in diameter, and including 7000 cubic yards of concrete and 760,000 pounds of steel; about 4500 feet of this sewer will be on pile foundation. Plans and specifications may be seen at office of Commissioners and of Harrison P. Eddy, consulting engineer, 14 Beacon St., Boston, Mass.; certified check for 7 per cent. of total amount of bid, or "bidder's bond," as described in form of proposal; J. B. F. Breed, chief engineer.

Sewer Construction.—Bids will be received at office of Commissioners of Sewerage (W. C. Nones, chairman, and Charles B. Weaver, secretary-treasurer), Equitable Bldg., Louisville, Ky., until May 7 for construction of 16th street sewer, contract No. 37 of comprehensive system of sewerage; work will consist mainly of building 1250 feet of concrete sewer, 27 to 39 inches in diameter, in trench 6 to 15 feet deep, and including 280 cubic yards of concrete; plans and specifications may be seen at the office of Commissioners; each bid to be accompanied by certified check for 7 per cent. of amount of bid, or "bidder's bond," as described in form of proposal; J. B. F. Breed, chief engineer.

Skidder and Loader.—D. H. Greene, Box 555, Newbern, N. C., wants second-hand skidder and loader.

Spark-arrestor.—Summers & King, Olin, N. C., want hood, or spark-arrestor, for chimneys and stacks.

Steam Shovel.—Eastern Railway Supply Co., 413 American Bldg., Baltimore, Md., wants 45-ton steam shovel.

Stearne Machinery.—See "Oil Mill."

Steel Ceilings.—Sealed proposals will be received at office of treasurer Southern Branch N. H. D. V. S., National Soldiers' Home, Va., until May 17 for material and labor for steel ceilings, barracks Companies E, M, N and O, in accordance with instructions and specifications, copies of which, with blank proposals and other information, may be had upon application to John T. Hume, treasurer.

Steel Girders.—Potomac Milling & Ice Co., Keyser, W. Va., wants steel girders, etc., for construction of \$15,000 livery stable.

Telephone Supplies.—Hilham & Livingston Branch of Home Telephone System. W. D. Fiske, secretary, Hilham, Texas, wants prices on telephone supplies.

Telephones.—Benjamin J. Baldwin, president Board of Education, Montgomery, Ala., wants prices on telephones.

Underpass Construction.—Board of Public Works, Alex. G. Barret, chairman, Louisville, Ky., will receive bids until May 24 for construction of underpass or undergrade crossing in Oak street, between 8th and 10th streets, to be built by city of Louisville and Louisville & Nashville Railroad Co.; work consists of 20,000 cubic yards of excavation, 2300 cubic yards of plain and reinforced concrete, 2000 square yards of granite-block pavement and other minor items. Plans and specifications may be seen at office of Board

of Public Works; copies sent on request; proposals to be made on forms furnished by Board of Public Works; certified check, 5 per cent. of amount of proposal.

Upholstering Machinery.—Shilling Mercantile & Furniture Co., Alexandria, La. (until July 15), wants prices on upholstering machinery.

Ventilating Equipment.—Benjamin J. Baldwin, president Board of Education, Montgomery, Ala., wants prices on ventilating equipment for \$90,000 school building.

Water and Sewer System—Office of Constructing Q. M., Fort Sam Houston, Texas.—Sealed proposals will be received until May 12 for construction of extensions to water-distributing, sewerage and drainage systems for additions to post hospital at Fort Sam Houston. Plans and specifications may be seen in above office. Address Tilman Campbell, Constructing Q. M.

Water-power.—G. W. Ford, Louisburg, N. C., wants prices on machinery for development of water-power and transmission of electricity.

INDUSTRIAL NEWS OF INTEREST

Ernst Wiener Announcement.

The Ernst Wiener Company, New York, manufacturer of industrial cars and tracks, has appointed the W. K. Kenly Company of Chicago as its district sales agent.

F. A. Clegg & Co. Receive Contract.

F. A. Clegg & Co., Louisville, Ky., have received contract for the heating, wiring and power plant for the I. O. O. F. Widows and Orphans' Home at Lexington, Ky.

Wants Manufacturers' Agencies.

The Statesville (N. C.) Plaster & Cement Co. want to correspond with manufacturers relative to accepting agencies for materials suitable for handling in connection with plaster and cement.

Porter Locomotive for Sale.

Operators who may need a locomotive are invited to address the Pruden Coal & Coke Co., 401 Van Deventer Bldg., Knoxville, Tenn. This company offers at a low price a new Porter locomotive of class B, mine style.

Machine Plant for Sale.

There is offered for sale a machine and repair shop on the Belt Line in Norfolk and Portsmouth, Va. The plant is thoroughly equipped for repairs to machinery, cars, locomotives, etc. Full investigation is invited. Address "Plant," Box 677, Norfolk, Va.

Concrete Piling and Foundations.

The contract for the foundations, including concrete piling, of the new six-story warehouse to be erected on Pier 2, Baltimore, for the Standard Oil Co. has been awarded to the Raymond Concrete Pile Co. of New York and Chicago. Haskell & Barnes, Baltimore, are the architects, and William Ferguson & Bro., Baltimore, the general contractors.

Wants Woodworking Plants.

The Manufacturers' Record is informed that Walteville, W. Va., is an advantageous location for handle and furniture manufacturing and the people of the town want to have these plants established. Inducements will be offered and information can be obtained by addressing J. E. Crosier at Walteville.

A Progressive Florida City.

Among the progressive smaller cities of Florida is Perry, in Taylor county. The citizens recently voted an issuance of \$15,000 of sewerage and \$15,000 of street improvement bonds, and John C. Culhoun, Clerk of the Circuit Court, is offering them for sale. Perry is located on four railways, the Atlantic Coast Line having recently been extended to the city.

Factory Site Offered Free.

Manufacturers who are prepared to locate in Georgia are advised that a 12-acre site for a plant at Vienna, Ga., can be obtained free. The land is connected with railway transportation facilities by a side track and has an artesian well and tenant-houses. An oil refinery, a cotton mill or other enterprise is wanted. D. B. Thompson of Vienna can give further details.

Contracts for the Soule Company.

Numerous contracts are reaching the Soule Steam Feed Works of Meridian, Miss. As indicated by its title, the company makes a specialty of its type of steam feed, which is in demand throughout the country, besides manufacturing lumber-stackers, etc. It has

Water-works.—J. M. Gannaway, City Clerk, McAlester, Okla., will receive bids until May 24 for construction of water extension, as follows: 26,022 linear feet (434 tons) of 6-inch cast-iron water pipe, class B; 2210 linear feet (25 tons) of 4-inch cast-iron water pipe, class B; 48 6-inch Ts; 5 6-inch crosses; 15 6-inch gate valves and cast-iron boxes; 53 double-nozzle hydrants; also 3250 linear feet 2-inch and 1½-inch galvanized iron pipe, estimate \$914; total engineer's estimate \$25,704; certified check for 5 per cent. of bid. J. Phelan, City Engineer.

Well-drilling Machinery.—W. Shedd Paxton, Calcutta, India, wants data, prices and discounts on well-drilling machinery and supplies.

Woodworking Machinery.—R. L. Franklin, Route No. 1, Glade Hill, Va., wants new or second-hand gang edger and other mill machinery.

Woodworking Machinery.—See "Manual-training Equipment."

Woodworking Machinery.—See "Bucket Machinery" and "Box Machinery."

Is kept on alignment. The directories have been adopted by owners of the most prominent buildings in the United States, Canada and Cuba. They are manufactured by the Table & Ticket Co., 70 West Jackson Bldg., Chicago; 281 Broadway, New York; 822 Market St., San Francisco.

Has Atlanta Offices for Prescott Co.

Finding that the demand for its product was increasing in the South, the Fred M. Prescott Steam Pump Co. has established another sales office. This is located at Atlanta, Ga., in charge of R. L. Radcliffe, who has been connected with the company's sales department for some time and will give attention direct to the Prescott trade in the South and Southeast. The company has its main plant at Milwaukee, manufacturing pumping engines, hydraulic machinery, condensing apparatus, etc. It announces that the Atlanta office is equipped with engineering data and estimates affecting any pumping-machinery problem.

Opportunities in New Oklahoma Town

The rapid development of Oklahoma and the establishment of new towns in that State frequently presents advantageous opportunities for investors and homeseekers. An instance of opportunities in a new town is the opening of Milton Le Flore county. Arrangements are being made for a formal opening on June 3, and the development firm interested is making offers to purchasers. Among the plans in view is the mining of the seven-foot vein of coal on a 70-acre tract of land. This operation is to be owned by the town residents. Information regarding Milton can be obtained by addressing Stoner, Elton & Ford, Muskogee, Okla.

Brick and Sewer Pipe Machinery.

It is evident that purchasers of Taplin-Rice-Clerkin machinery derive satisfaction from using that make of equipment, because they order additional apparatus from the same manufacturer. The Don Valley Brick Co., Toronto, Ontario, has added a new dry fan and other necessary equipment; the Buckeye Fire Clay Co., Uhrichsville, Ohio, has installed a sewer-pipe press and other equipment; the Pomona Terra Cotta Co., Pomona, N. C., has received the last carload of machinery previously contracted for. These three companies had previously used Taplin-Rice-Clerkin machinery, and the installations mentioned were bought from the Taplin-Rice-Clerkin Co. of Akron, Ohio.

Imperial Roadway in Baltimore.

In considering materials for paving the Stony Run bridge, on the St. Paul street boulevard, in Baltimore, it is understood that the City Engineer's Department has offered the work to the Imperial Road Co., Times Bldg., New York. It is also understood that several private streets in Canton, a suburb of Baltimore, will also be paved with this same material. Imperial roads are constructed cheaper in cost than macadam roads, and, it is claimed, are dustless, noiseless, not slippery and practically indestructible. Full information concerning the methods of construction, opinion of authorities and places where the road has been laid are contained in a pamphlet issued by the company.

New J. H. Williams Plant.

The J. H. Williams Company, Utica, N. Y., announces it is constructing in Massachusetts a larger plant, which will be equipped with a consignment of new and improved machinery, in addition to present equipment. With these increased facilities and better location, the company will be able to handle orders more promptly. The former policies of the company will be continued under the management of Ralph O'Brien, who has been connected with the company for several years under the direction of its former treasurer and manager, Frederick B. Hart, who because of ill-health has been compelled to retire. Arthur O. Buzzell and Miles L. Matthews will continue as representatives. The J. H. Williams Company manufactures Williams' hand threading and plain shuttles, domestic and tempered steel wire heddles, hedge frames, reeds, bobbins, spools, etc.

Union Marine Works, New Orleans.

Among the leading industrial enterprises of New Orleans is the Union Marine Works, with the following officers: President, Victor Loisel; vice-president, F. W. Sadler; secretary-treasurer, Henry J. Loisel; manager, Beck Johnson; assistant manager, W. J. Tierney. This company organized with a capital of \$50,000 and acquired the Southern Marine Works at Algiers, opposite New Orleans. It erected two additional buildings and installed modern equipment to increase and improve the output. The plant includes an iron and brass casting foundry and a com-

plete equipment for marine repairs, boat building and machine work for cotton factories, sugar plants, sawmills, etc. Electricity and compressed air furnish the power, and all the machines are operated by individual electric motors. A tube-welding machine is one of the innovations in the plant.

Link-Belt Company Orders.

Among orders recently received by the Philadelphia plant of the Link-Belt Company are coal and ashes handling machinery for iron works, four gravity discharge elevators, elevating and conveying machinery for handling sugar, bituminous coal handling machinery, in Cuba; elevators, conveyors and miscellaneous machinery for handling phosphate rock, in Florida; locomotive coal station, machinery for handling limestone batch, coaling chutes for retail coal pocket, in New Jersey; retail coal-pocket outfit, industrial system, coal handling machinery for railroad, in New York; ashes handling machinery, screening apparatus, in Nova Scotia; barrel elevator for brewery, slate conveyor for handling boxes, two gravel conveyors, elevators for handling large bales, miscellaneous slate elevator machinery, coal handling machinery for water-works, in Pennsylvania.

Star Expansion Bolt Co. at New Orleans.

The manufacture of expansion bolts is the specialty of the Star Expansion Bolt Co., and this company has found it advisable to arrange for representation at New Orleans. It has appointed D. S. Miller as Southern sales agent, with offices at 1023 Maison Blanche, New Orleans. Mr. Miller will have ready for inspection and quick shipment the company's standard line of Star expansion bolts, toggle bolts, screw anchors, cable hangers, enameled bridle rings, drill holders and special drills to fit, and standard Star and pipe drills for brick and stone. It is Mr. Miller's intention to be especially active in presenting the merits of the Star specialties to Southern purchasers, and he anticipates increasing largely the company's present trade. The company's executive offices are at 147 Cedar St., New York.

The Watkins Plant.

The Watkins Machine & Foundry Co., Hattiesburg, Miss., deals in machinery and general mill supplies and makes a specialty of breakdown jobs, brass and iron castings, locomotive and car repairing. Its plant covers eight acres and is equipped with modern and improved machinery, with a capacity of repairing and rebuilding 20 box-cars per month. The New Orleans & Northeastern Railroad has had a number of its worn-out and broken-down cars rejuvenated at the Watkins plant during recent months. In addition to this, this company has rebuilt and repaired seven locomotives since January 1. In its territory the Watkins Machine Foundry Co. is the exclusive agent of the Wheland Machine Works, Chattanooga Machinery Co., Street Brothers Machinery Co., Eagle Saw Works, Burnham Steam Pumps, Graton & Knight Manufacturing Co. and Cincinnati Rubber Co.

From Crocker-Wheeler Company.

Among the large direct-current generators recently sold by the Crocker-Wheeler Company of Ampere, N. J., is one of 300-kilowatt capacity, 250 volts, purchased by Perry Fay Manufacturing Co., Elyria, Ohio; another of this type, capacity of 200 kilowatts, 125 volts, was bought by the Cleveland (Ohio) Provision Co. There were many sales of smaller generators ranging in size from 35 to 100 kilowatts. A large order was placed with the Spanish-American Iron Co., Felton, Nipe Bay, Cuba, for 230-volt direct-current motors aggregating 235 horse-power. Another sale of direct-current motors which totalled 135 horse-power was made to the Morgan Engineering Co., Alliance, Ohio. The International Silver Co., Meriden, Conn., has ordered six Crocker-Wheeler Form I machines, having a combined capacity of 131 horse-power. In addition to the above a large number of smaller orders for direct-current motors have been booked by the Crocker-Wheeler Company.

The Richmond Iron Works.

The Richmond Iron Works, Richmond, Va., has reorganized and sold \$50,000 of preferred bonds. Under new management the company is preparing to develop its casting business, especially the manufacture of manholes, washers, mooring posts, iron columns and meter boxes. The company has one contract for 3000 tons of washers, bits and mooring posts and is supplying the cities of New York and Brooklyn with manholes. Its plant includes main foundry, machine shop, brass foundry, pattern and blacksmith shops and electric plant for lighting and power. The

equipment includes two electric traveling cranes, one of which has shifted with ease 20,000-pound alkali kettles manufactured by the company. Eight thousand pounds of washers are produced daily, while iron columns from 500 to 20,000 pounds each and mooring posts up to 2300 pounds each can be manufactured. The officers recently elected are: President, Col. C. E. Wingo; vice-president, Cole Scott; secretary and treasurer, Massie Nolting; general manager, Louis Burnstein.

Letters Praising Lytton Traps.

The Lytton steam, return and vacuum traps are attracting more attention every day. These devices are offered as comprising factors which appeal to people who want to promote the economy and efficiency of their plants. They are manufactured by the Lytton Manufacturing Corporation, Franklin, Va. The company recently received a letter from the Tunis Lumber Co. of Norfolk, as follows: "We enclose check in payment for the return-trap installed by you with the understanding that it was to be paid for only when we dried more lumber, dried it better and cheaper, with saving of fuel. It has fully met every requirement and more. Your trap surely meets a long-felt want by all users of drykilns. All of our skeptics are converts and they also have only words of praise. We have five brick kilns, 115 feet long, to dry the cut of a double-band mill averaging 70,000 feet daily on a steam pressure of 80 pounds, and it does it entirely, with room to spare." The Lytton company received another letter from the Tar River Lumber Co., Rocky Mount, N. C., as follows: "We take pleasure in recommending the Lytton return-trap and feel we are doing the man that buys the trap a greater favor than the maker. We commenced to use the trap they installed for us on February 8, and it has never given us one bit of trouble, but it has saved us at least four cords of slabs per day—\$8 daily. We can dry at least 20 per cent. more lumber than we could when we used pumps and old-style traps, and our foreman says: 'Boss, it's fine.' So much easier for them."

TRADE LITERATURE.

The New York Skyline.

The demand for the 1909 calendar issued by the Audit Company of New York so largely exceeded the number provided that the company has obtained copies of the original etching of "The New York Skyline—1909" for distribution. This will be remembered as the illustration on the company's calendar. Those who are interested can address the company at 165 Broadway, New York.

Data on the Jones Stoker.

In the Publicity Magazine for April are various photographic views and descriptive texts telling about the advantages of using the Jones stoker. This device has been accepted by many engineers because of its efficiency for stoking purposes, and the manufacturer finds the demand increasing steadily. The Under-Feed Stoker Co. of America, Marquette Bldg., Chicago, manufactures the Jones stoker.

Ingersoll-Rand Literature.

Recent literature issued by the Ingersoll-Rand Company comprises Forms No. 6002, 4010 and 3001. These pamphlets refer respectively to the Gibson-Ingersoll electric-air track channeler, telescope feed hammer drills and air and gas compressors. They present timely information of interest to people who are concerned with the use of the class of machinery mentioned. Address the company at 11 Broadway, New York.

Works Administration.

Production engineering is the science of economical production. Its scope is the entire field of industry. Its aim to make any business, whatever it may be, more productive. In a pamphlet entitled "Works Administration" this subject is described and results pointed out which have been accomplished by Gunn, Richards & Co., production engineers and public accountants, 43 Wall St., New York, during the past quarter of a century.

Concrete Silos.

An interesting pamphlet has been prepared by Percy H. Wilson and C. W. Gaylord on the construction of concrete silos. The subject has been handled in such a simple but thorough manner than anyone not familiar with the subject can easily understand it. Not only is the construction of concrete silos explained in detail, but numerous illustrations are presented. The pamphlet is being distributed by the Association of American Portland Cement Manufacturers, Land Title Building, Philadelphia.

of American Portland Cement Manufacturers, Land Title Building, Philadelphia.

Niagara Falls Metal Stamping.

Timely literature for people interested in metal stamping, hardware specialties, etc., is comprised in several illustrated folders and leaflets issued by the Niagara Falls Metal Stamping Works, Niagara Falls, N. Y. This company is calling especial attention to its embossed sheet-metal letters and figures made of aluminum and brass in various finishes. Niagara Falls products include stamped and formed specialties from sheet and plate steel, brass, tin, copper and aluminum, steel and other rods, bars and wire, etc.

Forged Steel Hydraulic Jacks.

The Duff-Bethlehem hydraulic jacks are forged entirely out of steel. They are offered in various styles and capacities for a vertical or horizontal lift and are giving satisfaction to many users. The manufacturer is now distributing an illustrated catalogue describing these jacks, besides referring to the fact that it is also the exclusive manufacturer of the Barrett jacks and the Duff ball-bearing screw jacks for any and every purpose. The Duff Manufacturing Co., 50 Church St., New York and Pittsburgh, Pa., is the manufacturer referred to.

Fighting Three Miles of Quicksand.

One of the difficulties met with in the big steel plant at Gary, Ind., was the presence of quicksand, and this problem was successfully dealt with by the use of Emerson pumps. Last December the Technical World printed an interesting reference to this quicksand work, and the article, with several illustrations, has been reprinted under the title "Fighting Three Miles of Quicksand," by Edward L. Pratt. The Emerson Steam Pump Co., manufacturer of the Emerson pump, Alexandria, La., is distributing the leaflet.

Browning Engineering Machinery.

Several bulletins issued recently by the Browning Engineering Co. are of timely interest. They include Bulletin No. 31, relating to the Browning lifting magnet; Bulletin No. 33, referring to the Browning Standard revolving steam shovel; Bulletin No. 34, relating to the Browning automatic bucket; Bulletin No. 35, relating to the Browning locomotive cranes; Bulletin No. 36, referring to the Browning railroad dumper. Each bulletin is illustrated with various photographic views and the accompanying description is brief but thorough. The Browning Manufacturing Co. is of Mansfield, Ohio.

Standard Bond Oils.

One of the most important questions in connection with the construction of good roads is to provide some means of allying the dust, preserving the surface and binding the road. To acquaint those having this work in charge with the quality and purposes of its several products devoted to this purpose, the Standard Oil Co., 26 Broadway, New York, has published a 40-page illustrated pamphlet. This company makes three products for road work—Standard asphalt road oil, Standard emulsifying road oil and Standard macadam asphalt binder—and the proper manner of applying them is described.

A Dean Bros. Pump Leaflet.

A new publication* of the Dean Bros. Steam Pump Works, Indianapolis, Ind., is a colored print presenting views of the company's duplex durable feed hammer drills and air and gas compressors. The brief description says the duplex durable "pumps are a wide departure from the old-style of duplex pumps. The steam cylinders are of a new type. The steam ports are arranged on a novel plan. The method of steam cushioning is new, and the valves are of an original form. They will not short stroke." The simple pumps are long-stroke pumps reduced to the simplest possible form and possess all the desirable features of the double-acting horizontal pumps.

From the American Well Works.

Samples of the latest type of machines built by the American Well Works, Aurora, Ill., are illustrated in a folder which that company is now mailing. In most instances only one sample of each line of machinery is illustrated, the object being to present an idea of the variety of equipment manufactured by the company. American turbine centrifugals, vertical compound-cylinder steam engines, heavy-duty deep-well pumps, coring machines for mineral prospecting and rock drilling, air lifts for pumping deep wells, air compressors, gasoline engines, etc., are included. Sand and dredge pumps and gold dredges are also built by the American Well Works.

Brick and Roofing Tile Machinery.

The continually increasing demand for bricks and roofing tile for construction purposes causes the manufacturers of brick and roofing and tile machinery, kilns, clayworking appliances and similar equipment to be active in the improvements of the designs they furnish. Among the progressive clayworking machinery builders is the Illinois Supply Co. of St. Louis, which has had more than 25 years' experience in the press-brick and roofing-tile industry. This company offers a complete line of machinery embodying such factors as simplicity, strength, power and durability. Its offerings are described in an illustrated catalogue now being distributed.

Wisconsin Engine Co. News.

The Wisconsin Engine Co., Corliss, Wis., has recently put in service the second engine sold to the Oliver estate in Pittsburgh. This engine, in the central power plant, is a 900-horse-power vertical cross-compound Corliss engine operating at 120 R. P. M. and direct connected to a 600 K. W. direct-current generator. A Wisconsin Corliss engine of the same capacity but of the horizontal cross-compound type has been in successful operation in the same engine-room for several years. This company has put into service smaller engines sold to J. M. Kohler Company, Sheboygan, Wis., and to Racine (Wis.) Manufacturing Co.

Drills and Sockets That Are Different.

People who are interested in drilling will find information of a timely nature in "Drills and Sockets That Are Different." This is an illustrated booklet published by the American Specialty Co. of Chicago to describe its drills and sockets—the Collis line of speed drills, combining the two principals of a rolled section high-speed steel blade and a standard tapered shank. This combination produces a drill which the manufacturer says has the accuracy of a high-grade high-priced high-speed milled drill and the toughness, strength and cutting qualities of the flat twisted drill. The drill has a common standard tapered shank, no special chucks being required, and is offered in both the flat and flat twisted types.

Robbins & Myers Standard Fans.

In most parts of the country this is the season of the year when people give thought to the installation of fans for cooling the atmosphere. The introduction of the electric fan has been a boon to mankind, and many noted manufacturers have given their attention to the design and production of electric fans embodying the features desired. The Standard direct and alternating current fans are manufactured by the Robbins & Myers Company of Springfield, Ohio, and are interestingly described in an illustrated catalogue now being distributed. All the views presented are from photographs, and the accompanying text presents data as to sizes, prices, possibilities, etc. The Robbins & Myers product includes ceiling, desk, bracket, oscillating and exhaust fans.

J. S. Mundy Hoisting Engines.

J. S. Mundy hoisting engines and similar equipments are used by railway companies, steamship companies, bridge builders, contractors and for lighteraage purposes, piling, dredging, mine hoisting, etc. In the design and construction of these engines the purpose for which they are to be used is given full consideration, so that the design and proportion of the various parts combine to promote efficiency and durability. The Mundy product is described in an illustrated catalogue now being distributed to inform prospective purchasers regarding the merits of the contractor's equipage of all descriptions for hoisting and handling material manufactured by J. S. Mundy, 22 to 34 Prospect St. and 39 Congress St., Newark, N. J.

Berger's Raydiant Sidewalk Lights.

An effective lighting system for sidewalks, vaults, roofs, etc., accomplished by the use of daylight instead of artificial lights, should commend itself to those who desire to use basement or other space requiring lighting. With properly-designed prisms it is easy to refract daylight in the direction desired and thereby make it possible to utilize space that might otherwise be valueless. A system which is said to accomplish this and fulfill the best requirements of construction, etc., is the Berger raydiant reinforced system of vault and sidewalk lighting. It is manufactured by the Berger Manufacturing Co., Canton, Ohio, and is comprehensively described and illustrated in a catalogue which this company is distributing.

J. F. Maynard Ice Machinery.

The refrigeration of buildings for various purposes, the cooling of various substances

and the manufacture of ice are called for every day throughout the country. Inventors and manufacturers of machinery are meeting this demand, and among them is J. F. Maynard, successor to the American Ice Machine Co., 116-122 Geyer Ave., St. Louis. Mr. Maynard is distributing an illustrated book which describes the ice-making and refrigerating machinery and supplies he offers to purchasers. The designs he is marketing have been proven by many years' experience to be efficient and economical. Mr. Maynard has had 19 years' experience in meeting the needs of people who want to build or enlarge ice plants or to install ice or refrigerating equipments in packing-houses, curling plants, creameries, chemical works, sugar refineries, distilleries, hotels, apartment-houses, hospitals, theaters and other buildings, ocean vessels, skating rinks, blast furnaces, and any other place.

Steel Sheet Piling.

An interesting publication for the information of contractors and others concerned in piling work is "Steel Sheet Piling: Types of Construction and Examples of Installation." This book is illustrated by numerous photographic views of important construction work in which the steel sheet piling of the Carnegie Steel Co. has been used to advantage. This is the United States steel sheet piling manufactured under the patent of Samuel K. Behrend. It is a plain section, interchangeable and complete in itself, and has had constant increased application since its first introduction, proving adequate to various forms of construction. Its lighter weight section is especially adapted to sewer work, and its heavier weight sections are suitable for driving through harder material. These facts and various others may be found in the book, including reference to the 12-inch forty-pound section withstanding successfully a strain exceeding 12,000 pounds per linear inch. The Carnegie Steel Co., Pittsburgh, Pa., manufacturer of this steel sheet piling, is prepared to send copies of the book to people who are interested in investigating this subject.

Industrial Progress.

In "Industrial Progress" for April, the fourth number of this publication, we are presented various illustrated articles that will interest people who are concerned with modern electric plants and other equipments for mining, manufacturing and milling purposes. While this publication is issued in the interest of one company, it is intended to preserve in convenient form for distribution a quantity of valuable mechanical data not heretofore generally available. The subjects in the number mentioned include the new central power station of Walter Baker & Co., the new Keewatin mill of the lake of the Woods Milling Co., the use of electricity in mining and handling coal, Klimnickin River rushing station at Milwaukee, modern steam condensing apparatus, economy and cleanliness in Packington, lighting transformers, etc., besides a buyers' reference which instructs readers where to apply for information regarding air compressors, cement-making machinery, crushing equipments, electrical apparatus, steam engines, gas engines, pumping engines, flour-mill machinery, mining and oil reduction equipments, power-transmitting machinery, ventilating fans, sawmill machinery, etc. For copies of this publication address Industrial Progress, 330 Clinton St., Milwaukee, Wis.

The Leatherwood Development.

The MANUFACTURERS' RECORD has received authentic information regarding the proposed development of the Leatherwood phosphate mines in Maury and Hickman counties, Tennessee, by the Independent Phosphate Co. of Columbia, which recently acquired the property. The company is preparing plans for the erection of a plant to have a minimum daily capacity of 400 tons, and will require two large crushers, two elevators, two drier cylinders, a Corliss engine of 200 horse-power, two boilers of 150 horse-power each, air compressor with battery of drills, shafting, etc. The mines will be equipped with tram cars, and rails, bolts, pipes, etc., will be required for these. Mr. A. H. Reed is the engineer in charge of construction, and may be addressed care of Independent Phosphate Co., Columbia. Transportation facilities will be provided by a railroad which is under construction from Franklin to Leatherwood, and is expected to be completed by October 1.

NATIONAL MACHINERY DEALERS.

Their Fourth Annual Meeting to Be Held in Pittsburgh.

The National Supply and Machinery Dealers' Association in its fourth annual meeting, May 12-14, at Pittsburgh, will be in joint convention with the American Supply and Machinery Manufacturers' Association, which is in session this week with the Southern Supply and Machinery Dealers' Association at Chattanooga. The program will include interesting papers on various phases of the trade and features of the work of the two organizations. Among the speakers will be Messrs. Geo. Puchta, the Queen City Supply Co., Cincinnati; Charles F. Aaron, New York Leather Belting Co., New York; F. A. Hall, the Yale & Towne Manufacturing Co., New York; W. E. Frick, the Frick & Lindsay Company, Pittsburgh; Henry B. Lupton, Oliver Iron & Steel Co., Pittsburgh; E. H. Hargrave, the Cincinnati Tool Co., Cincinnati, and D. K. Swartwout, the Oliver Blower Co., Cleveland. The members of the National Supply and Machinery Dealers' Association are:

California.

Harron, Rickard & McCone, Los Angeles. Henshaw, Bulkley & Co., Los Angeles. Harron, Rickard & McCone, San Francisco. Henshaw, Bulkley & Co., San Francisco. Pacific Tool & Supply Co., San Francisco.

Colorado.

Scott Supply & Tool Co., Denver.

Connecticut.

T. Hawley & Co., Bridgeport. C. S. Mersick & Co., New Haven.

Illinois.

Machinists' Supply Co., Chicago. Manning, Maxwell & Moore, Inc., Chicago.

Indiana.

Vonnegut Hardware Co., Indianapolis.

Massachusetts.

Chandler & Farquhar Company, Boston. Grant Nail & Supply Co., Boston. Prentiss Tool & Supply Co., Boston.

Michigan.

T. B. Rayl Company, Detroit. Chas. A. Strelinger Company, Detroit. C. C. Wormer Machinery Co., Detroit.

Minnesota.

Northern Machinery Co., Minneapolis. F. E. Satterlee Company, Minneapolis. Robinson, Cary & Sands Company, St. Paul.

Missouri.

A. B. Bowman, St. Louis. W. R. Colcord Machinery Co., St. Louis. J. W. Wright & Co., St. Louis. Bunting-Stone Hardware Co., Kansas City.

New York.

Beals & Co., Buffalo. Weed & Co., Buffalo. James Beggs & Co., New York.

Manning, Maxwell & Moore, Inc., New York.

James J. McCabe, New York. Montgomery & Co., New York.

Patterson, Gottfried & Hunter, Ltd., New York.

Prentiss Tool & Supply Co., New York.

Vandyck-Churchill Company, New York.

Louis Ernst & Sons, Rochester.

Syracuse Supply Co., Syracuse.

C. H. Wood Company, Syracuse.

Troy Belting & Supply Co., Troy.

Ohio.

Boebinger Hardware Co., Cincinnati. Cincinnati Mill & Mine Supply Co., Cincinnati.

V. N. Devou Supply Co., Cincinnati. Wm. T. Johnston Company, Cincinnati. E. A. Kinsey Company, Cincinnati. E. K. Morris & Co., Cincinnati. Pickering Hardware Co., Cincinnati. Queen City Supply Co., Cincinnati. Vulcan Supply Co., Cincinnati.

Wirthlin & Scanlan, Cincinnati.

Cleveland Tool & Supply Co., Cleveland.

Lake Erie Nail & Supply Co., Cleveland.

Motch & Merryweather Machinery Co., Cleveland.

McIntosh Hardware Corporation, Cleveland.

W. M. Pattison Supply Co., Cleveland.

Strong, Carlisle & Hammond Company, Cleveland.

White Tool & Supply Co., Cleveland.

Columbus Mill & Mine Supply Co., Columbus.

Patterson Tool & Supply Co., Dayton.

Bostwick-Braun Company, Toledo.

National Supply Co., Toledo.

Stambaugh-Thompson Co., Youngstown.

Pennsylvania.

W. H. Taylor & Co., Allentown.

Erie Manufacturing & Supply Co., Erie.

Hazleton Machinery & Supply Co., Hazleton.

Baird Machinery Co., Pittsburgh.

Brown & Zortman Machinery Co., Pittsburgh.

Frick & Lindsay Company, Pittsburgh.

Hukill-Hunter Company, Pittsburgh.

Machinists' Supply Co., Pittsburgh.

Pittsburg Gage & Supply Co., Pittsburgh.

Pittsburg Supply Co., Pittsburgh.

Somers, Fitler & Todd Co., Pittsburgh.

C. A. Turner, Inc., Pittsburgh.

Joseph Woodwell Company, Pittsburgh.

Charles Bond Company, Philadelphia.

Madock & Co., Philadelphia.

Powell, Clouds & Co., Philadelphia.

W. E. Shipley Machinery Co., Philadelphia.

Vandyck-Churchill Company, Philadelphia.

Scranton Supply & Machinery Co., Scranton.

Rhode Island.

Standard Mill Supply Co., Providence.

Thomas & Lowe Machinery Co., Providence.

Utah.

Salt Lake Hardware Co., Salt Lake City.

Washington.

Hallidie Machinery Co., Seattle.

Wisconsin.

Phillip Gross Hardware Co., Milwaukee.

McDowell, Stocker & Co., Milwaukee.

O. L. Packard Machinery Co., Milwaukee.

Hoernel Hardware Co., Racine.

A \$200,000 Electric Plant.

The Philadelphia Trust & Securities Co., of Wilmington, Del., is interested in planning the construction of a water-power-electric plant on the Slate River, one and one-half miles from Arvonia, Va. It contemplates building a 60-foot dam to develop 2000 brake horse-power at normal stage, the construction and water-power-electrical machinery to cost \$200,000. C. P. E. Burgwyn of Richmond, Va., is the engineer in charge.

New Industries at Tulsa.

The Tulsa Commercial Club, Tulsa, Okla., advises the MANUFACTURERS' RECORD of two new industries secured for that city. They are a \$30,000 plant for manufacturing glass lamp chimneys and hollowware, and an \$80,000 cottonseed-oil mill. The Cherryvale Glass Co. of Cherryvale, Kans., will build the glass plant, and when it is completed will employ 135 men and 15 women. Its buildings will be of

corrugated iron and frame. F. G. Kinney, formerly of Birmingham, Ala., is erecting the oil mill. He expects to handle 80 tons of seed daily, this being about 40 per cent. of the production within 40 miles of Tulsa. His mill will be completed for this year's crush.

Alabama Hardware Men.

L. G. Smith of Ensley, secretary of the Alabama Retail Hardware Association, writes to the MANUFACTURERS' RECORD:

"Our Birmingham convention, May 12-14, is going to be a big one. Several good speakers will be with us, among them C. A. Peck, secretary of the Wisconsin Mutual Insurance Co. and Retail Hardware Association; Mr. R. W. Shapleigh, vice-president of the Norvell-Shapleigh Hardware Co.; Mr. W. D. Simmons, president of the Simmons Hardware Co., and Mr. M. L. Corey, secretary of the National Hardware Association. The Birmingham jobbers and manufacturers are going to show us the city, the association will give a smoker and everybody present will have both the opportunity of enjoying the pleasures and obtaining much good from the convention."

Florida Bankers' Convention.

At the annual convention of the Florida Bankers' Association, held at Live Oak, Fla., April 23 and 24, the following officers were elected for the ensuing year: President, Col. C. A. Hardee of Live Oak; vice-presidents, H. E. Taylor, Gainesville; F. F. Bordin, Lake City; G. E. Lewis, Tallahassee; R. R. Turnbull, Monticello; C. J. Carlton, Wachula; George W. DeSaussure, secretary and treasurer; delegate to American Bankers' Association, J. T. Dismukes; alternate, W. C. Lewis.

American Mechanical Engineers.

The American Society of Mechanical Engineers is in session this week at Washington, with between 400 and 500 visitors in attendance. The program includes a number of technical papers and one on home-making in the arid regions of the country. Members of the society will inspect a number of interesting engineering achievements in and near Washington.

Farmville Herald's Trade Edition.

The *Herald* of Farmville, Va., has recently issued a trade edition reviewing the social, religious, educational and industrial progress of Farmville and vicinity. It contains numerous illustrations and much descriptive data which tell an interesting story of material growth.

Implement Blue Book. Publishers, Midland Publishing Co., Midland Building, St. Louis, Mo.

This is the sixtieth edition of the standard implement and vehicle directory of the United States. It contains in an alphabetical order a list of implements and vehicles and their appurtenances, and, under each, names and addresses of the manufacturers. This list occupies 310 pages, and the remaining 150 pages are occupied by a new feature treating the full line of each manufacturer in general terms. In addition there is much interesting and important information covering the personnel and business organization of each manufacturing establishment. A system of double indexing and cross indexing, with index letters at the edges of pages, adds to the convenience of 1909 issue.

The Mississippi Retail Hardware Dealers' Association will hold its annual meeting at Jackson May 11 and 12.

It is estimated that between 3000 and 3500 carloads of peaches will be shipped from Georgia during the coming season.

The "Go Get It" Spirit.

[Lynchburg (Va.) News.]

The MANUFACTURERS' RECORD is right. The "Go get it" spirit—the "Go do it" philosophy are becoming more and more generally accepted as the slogan in the South's advance. It is at length fully realized that this section enjoys natural advantages superior to those of any other part of the country—and that a more rapid, more impressive process of development can be maintained in the South than elsewhere, provided the determination is present—the vigorous, dauntless public spirit aroused among the Southern people, to let the world know of these potentialities, and to themselves lend active aid in the work of promoting industrial growth and expansion. Thus it is seen that Southern cities are resorting to modern methods in advertising; that they are moved by a sort of civic patriotism that means results; that their people are showing the faith that is in them and the loyalty to place that inspires them by contributing in dollars and cents the sinews necessary to a successful prosecution of the campaign of progress. In so far as Lynchburg is concerned, we know whereof we speak. The large amount of funds—something like \$70,000—just subscribed to inaugurate the local Chamber of Commerce is conclusive attestation of what Lynchburg people think of Lynchburg—the high estimate Lynchburg people place upon the possibilities of their city, and of their willingness to afford something besides mere idle boasting and encouraging conjectures to place Lynchburg in the position among American cities to which her advantages entitle. But, after all, this money contribution, however desirable in itself, is most encouraging in the indication it gives of the wealth and strength and tone and force of the local public spirit. It is but a token—a sign of a civic resource that is too valuable by far to be measured in current coin.

The paper giving an inventory of the water-powers of Georgia by State Geologist S. W. McCallie, published originally in the MANUFACTURERS' RECORD, has been issued in pamphlet form.

FINANCIAL NEWS

The MANUFACTURERS' RECORD invites information about Southern financial matters, items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

Review of the Baltimore Market.

Office MANUFACTURERS' RECORD,

Baltimore, Md., May 5.

In the Baltimore stock market during the past week there was considerable trading in bonds, Seaboard 4s being especially a feature. The trading showed sales as follows: United Railways trust certificates, 11½ to 11½; do. incomes, 55½ to 56; do. funding 5s, 80 to 81; do. 4s, 87% to 88½; Consolidated Gas 6s, 101½ to 101½; do. 4½s, 93½ to 94; Seaboard Air Line common, 15; Seaboard Company common, 14% to 15%; do. first preferred, 62 to 65; do. second preferred, 28 to 32; Seaboard 4s, 72½ to 77%; do. three-year 5s, 98% to 98½; do. 10-year 5s, 98% to 98½; Consolidated Cotton Duck preferred, 23; Cotton Duck 5s, 79½ to 79½; G.-B.-S. Brewing incomes, 14; do. 1sts, 43½ to 42.

Bank stock sold as follows: Merchants', 170; Union, 122½; Bank of Baltimore, 125; Citizens', 39½ to 39½.

Baltimore Trust sold at 287½ to 288; Colonial Trust, 26; Mercantile Trust, 145 to 148; Fidelity & Deposit, 159; International Trust, 133 to 134; United States Fidelity & Guaranty, 125; Maryland Casualty, 85.

Other securities were traded in thus: Consolidation Coal (when issued), 79%

to 84; do. scrip, 80 to 84; Houston Oil common, 9 to 8¾; do. preferred, 37½ to 38½; Atlantic Coast Line new 4s, certificates, 83½ to 85; Baltimore, Sparrows Point & Chesapeake 4½s, 91½; Norfolk & Portsmouth Tracing stock, 20% to 21; do. 5s, 87½ to 88½; Charleston City Railway 5s, 103½; Maryland Telephone 5s, 98½ to 98½; Georgia Southern & Florida first preferred, 96; do. 5s, 110 to 110½; Carolina Central 4s, 94; Georgia, Carolina & Northern 5s, 106; Maryland Electric 5s, 94% to 94%; Memphis Street Railway 5s, 97½ to 96¾; Norfolk Railway & Light 5s, 97½ to 97%; Baltimore City 3½s, 1980, 94½ to 94½; Alabama Consolidated Coal & Iron 5s, 84; Northern Central Railway stock, 106 to 105½; Anacostia & Potomac 5s, 103½; Colorado Southern 4s, 97%; Detroit United 4½s, 83½; Charleston & Western Carolina 5s, 100½; Lexington Railway 5s, 97; Consolidation Coal refunding 4½s, 94% to 94½; Fairmont Coal 1st 5s, 94½; Baltimore Brick common, 3½ to 4; do. preferred, 25; do. 5s, 77½ to 80; Atlantic Coast Line Consolidate 4s, 97 to 97½; West Virginia Central 6s, 102½; Brooklyn Rapid Transit 5s, 106½ to 107; Maryland & Pennsylvania incomes, 60; Western Maryland Railroad stock, 11 to 11%; Baltimore City Passenger 5s, 101½; Virginia Midland 3d, 109; do. 5th, 108½; Virginia Century, registered, 92; Baltimore City 3½s, 1940, 100½; Georgia & Alabama Consolidated 5s, 104½; Norfolk Street Railway 5s, 105½; Baltimore Traction (North Baltimore Division) 5s, 116; Baltimore Electric 5s, stamped, 90; Milwaukee Gaslight 4s, 92%; Atlanta Consolidated Street Railway 5s, 105½; Atlantic Coast Line of Connecticut stock, 280; Raleigh & Augusta 6s, 116½; Baltimore City 5s, 1916, W. L. 107; Birmingham Electric 1st 5s, 104½; Atlantic Coast Line of South Carolina 4s, 90%.

SECURITIES AT BALTIMORE.

Last Quotations for the Week Ended May 5, 1909.

| Railroad Stocks. | Par. | Bid. | Asked. |
|------------------------------------|------|------|--------|
| Atlanta & Charlotte..... | 100 | 185 | 225 |
| Atlantic Coast of Conn..... | 100 | 270 | 285 |
| Georgia South. & Fla..... | 100 | 25 | 30 |
| Georgia South. & Fla. 1st Pfd..... | 100 | 96 | 97 |
| Georgia South. & Fla. 2d Pfd..... | 100 | 75 | 77½ |
| Norfolk & Portsmouth Trac..... | 100 | 21 | 21½ |
| Seaboard Co. Com..... | 100 | 15½ | 16 |
| Seaboard Co. 1st Pfd..... | 100 | 62 | .. |
| Seaboard Co. 2d Pfd..... | 100 | 32 | 32½ |
| United Railways & Elec. Co..... | 50 | 11 | 11½ |
| Western Maryland..... | 50 | 11½ | 11½ |

Bank Stocks.

| | | | |
|---------------------------------|-----|------|-----|
| Citizens' National Bank..... | 10 | 39½ | 40 |
| Drovers & Mechanics' Bank..... | 100 | 230 | 230 |
| Frs. & Merchants' Nat. Bk..... | 40 | .. | 49 |
| First National Bank..... | 100 | 142 | 145 |
| Maryland National Bank..... | 20 | 20 | 20 |
| Merchants' National Bank..... | 100 | .. | 170 |
| National Bank of Baltimore..... | 100 | 124½ | 125 |
| National Exchange Bank..... | 100 | .. | 162 |
| National Marine Bank..... | 30 | 41 | .. |
| National Mechanics' Bank..... | 10 | .. | 29 |
| National Union Bank of Md..... | 100 | 122 | 124 |

Trust, Fidelity and Casualty Stocks.

| | | | |
|---------------------------------|-----|------|------|
| Baltimore Trust & Guar..... | 100 | 287 | 288½ |
| Colonial Trust..... | 50 | 25½ | .. |
| Continental Trust..... | 100 | 190 | 200 |
| Fidelity & Deposit..... | 50 | 157½ | 159 |
| International Trust..... | 100 | 135 | 140 |
| Maryland Casualty..... | 25 | 85 | .. |
| Maryland Trust..... | 100 | .. | 60 |
| Mercantile Trust & Deposit..... | 50 | 148 | 150 |
| Union Trust..... | 50 | .. | 74 |
| U. S. Fidelity & Guar..... | 100 | 124½ | 125 |

Miscellaneous Stocks.

| | | | |
|-----------------------------------|-----|----|-----|
| Con. Cotton Duck Com..... | 50 | 6 | 7 |
| Con. Cotton Duck Pfd..... | 50 | 21 | 22½ |
| Con. Gas, Elec. Lt. & P. Com..... | 100 | 30 | .. |
| Consolidation Coal..... | 100 | 83 | 84½ |
| G.-B.-S. Brewing Co..... | 100 | 2½ | 2½ |
| Georges Creek Coal..... | 100 | 85 | .. |

Railroad Bonds.

| | | | |
|--|------|-----|----|
| Atlanta & Charlotte Ext. 4½s..... | 100 | .. | .. |
| Atlanta Coast Line 1st 4s, 1952..... | 97 | 97½ | .. |
| Atlanta Coast Line new 4s, Cfrs..... | 84½ | .. | .. |
| Atlanta Coast Line Conn. 5s, Cfrs..... | 107 | .. | .. |
| Atlanta Coast Line, S. C. 4s, 1948..... | 94 | .. | .. |
| Balto. & Harrisburg 5s, 1936..... | 104 | .. | .. |
| Balto. & Harrisburg Ext. 5s, 1938..... | 103½ | 106 | .. |
| Carolina Central 4s, 1949..... | 94 | 95½ | .. |
| Charlotte, Col. & Aug. 1st 5s, 1910..... | 111½ | .. | .. |
| Coal & Coke Railway 5s, 1920..... | 94 | .. | .. |
| Col. & Green 1st 6s, 1916..... | 101 | .. | .. |
| Georgia & Alabama 5s, 1943..... | 104½ | 105 | .. |
| Georgia, Car. & North. 1st 5s, 1929..... | 105½ | 106 | .. |
| Georgia Pacific 1st 5s, 1923..... | 116 | .. | .. |
| Georgia South. & Fla. 1st 5s, 1945..... | 110 | 111 | .. |
| Maryland & Pennsylvania 4s, 1951..... | 90 | 91½ | .. |
| Petersburg Class B 6s, 1926..... | 126½ | .. | .. |
| Potomac Valley 1st 5s, 1941..... | 104 | .. | .. |
| Raleigh & Augusta 1st 6s, 1936..... | 116½ | 117 | .. |
| Seaboard Air Line 4s, 1950..... | 77½ | 78 | .. |
| Seaboard Air Line 5s, 10-Year, 1911..... | 98 | 98½ | .. |
| Seaboard Air Line 5s, 3-Year..... | 98½ | 98½ | .. |
| Seaboard & Roanoke 5s, 1926..... | 108½ | 109 | .. |
| Silver Spgs., Ocala & G. 4s, 1918..... | 97½ | 99 | .. |
| Southern Railway Dev. 4s..... | 82½ | 83 | .. |
| Virginia Midland 2d 6s, 1911..... | 103 | .. | .. |
| Virginia Midland 3d 6s, 1916..... | 109 | .. | .. |
| Virginia Midland 5th 5s, 1926..... | 108 | 109 | .. |
| Western Maryland 4s, 1952..... | 84% | 85½ | .. |
| West Va. Cent. 1st 6s, 1911..... | 102½ | .. | .. |
| Wilmington & Weld. Gold 5s, 1935..... | 113½ | 114 | .. |

Street Railway Bonds.

| | | |
|-----------------------------------|------|------|
| Anacostia & Potomac 5s, 1949..... | 103½ | 103½ |
| Atlanta Con. St. Ry. 5s..... | 105½ | 105½ |

| | | |
|---|------|------|
| Balto. City Pass. 5s, 1911..... | 91 | 101½ |
| Balto. Sp. Pt. & C. 4½s..... | 91 | 92½ |
| Balto. Trac. 1st 5s, 1929..... | 111½ | 112½ |
| Balto. Trac. G. N. B. H. 5s, 1942..... | 115½ | 117 |
| Central Ry. Com. 5s (Balto.), 1932..... | 112 | .. |
| Charleston City Ry. 5s, 1923..... | 104 | 105½ |
| Charleston Con. Elec. 5s, 1929..... | 91 | 92½ |
| City & Suburban 5s (Balto.), 1922..... | 108½ | 109 |
| Lexington Railway 1st 5s, 1949..... | 96% | 97½ |
| Macon Ry. & Lt. 1st Con. 5s, 1953..... | 95½ | 96 |
| Maryland Elec. Rys. 5s..... | 94% | 94½ |
| Memphis Street Railway 5s..... | 96% | 97 |
| Metropolitan 5s (Wash.), 1925..... | 114 | .. |
| Norfolk & Portsmouth Trac. 5s..... | 88 | 88½ |
| Norfolk Railway & Light 5s..... | 97½ | 98½ |
| Norfolk Street Railway 5s, 1944..... | 105½ | 106½ |
| United Railways 1st 4s, 1949..... | 55½ | 56 |
| United Railways Funding 5s..... | 80½ | 81 |

year was marked by severe and continued depression in the business. Very few new enterprises requiring electric equipment were brought out, and business largely depended upon current renewals and supplies. Thus orders received were only 70 per cent. of those received during each of the two previous years, and shipments were only 63 per cent. of those for 1907. The sales billed during the last year were only \$44,540,676, as compared with \$70,977,168 in the next preceding year, and the orders received were only \$42,186,917, as compared with \$59,301,040, respectively. Under the head of orders received are included only apparatus and materials manufactured by the company. Such items as labor of installation, materials of outside manufacture, freight, etc., are included under the head of sales billed.

It is further stated that orders received during the first half of the year were the smallest since 1904. This rate continued through the third quarter, with slight improvement during the rest of the year. Since then business conditions have improved, and the outlook is encouraging. The unfilled orders January 31, 1909, were about \$13,000,000, as compared with \$14,500,000 a year ago. The total number of orders and separate contracts received during the year was 248,384, an increase of 11,520, but the average value was 30 per cent. less. This increase in the number of orders and prevailing competition prevented the institution of desired economies.

Concerning the use of steam turbines, it is said: "More than 500 central distributing stations and industrial power plants have adopted the Curtis steam turbine as their generating units, and many are replacing old and inefficient types of prime movers with our turbine generators."

The total assets of the company are \$99,189,800. This includes cash, \$22,233,671; stocks and bonds, \$21,922,189; notes and accounts receivable, \$18,873,057; merchandise inventories, \$18,393,899; factory plants, \$13,900,000; copper mining investments, \$3,174,580, and other small items. The capital stock of the company issued is \$65,178,800.

Bank Reports.

The First National Bank of Birmingham, Ala., reports April 28, 1909, loans and discounts, \$5,685,050; total cash, \$3,025,058; capital stock, \$1,000,000; surplus and profits, \$760,545; circulation, \$988,800; total deposits, \$7,498,868; total resources, \$10,248,213. W. P. G. Harding is president; J. H. Woodward and J. H. Barr, vice-presidents; Thomas Hopkins, cashier, and F. S. Foster and Thomas Bowron, assistant cashiers; J. E. Ozburn, secretary savings department.

The First National Bank of Richmond, Va., reports April 28, 1909, loans and discounts, \$6,155,322; cash and due from banks, \$1,781,864; capital, \$1,000,000; surplus fund, \$800,000; undivided profits, \$36,254; circulation, \$951,700; total deposits, \$5,767,177; total resources, \$9,021,476; John B. Purcell, president; John M. Miller, Jr., vice-president and cashier; Chas. R. Burnett, J. C. Joplin, W. P. Ahelton and Alex. F. Ryland, assistant cashiers.

New Corporations.

Boyd, Texas.—Chartered: Continental State Bank; capital \$10,000; incorporators, J. G. Wilkinson, J. E. Willis, Ed. P. Williams, J. F. Britton and M. G. Denison.

Brazoria, Texas.—The First State Bank has filed its charter; capital \$10,000; incorporators, D. J. Osborn, M. B. Williamson and W. M. Brooks.

Carmen, Okla.—Official: State Guaranty Bank incorporated and chartered; capital \$30,000; F. N. Winslow, presi-

Continuing, the report says that the

dent; J. G. Duncan, vice-president, and Harry Dean, cashier, all at Carmen, Okla.

Capitol Hill, Okla.—Being organized: First National Bank, capital \$25,000, by Wm. Raymond, 100 West Main street, Oklahoma City, Okla.; S. R. Raymond, Wm. Mee, A. L. Niumz and Ed. Nimz.

Chidester, Ark.—The Bank of Chidester, capital \$15,000, is reported organized, with officers thus: President, J. S. Pharr; vice-president, Dr. W. A. Purifoy; cashier, W. G. Rushing; directors, W. J. Clingan, B. C. Powell, B. V. Powell, W. A. Lester, W. J. Hindman, C. T. Atkins. Business is to begin about May 15.

Columbia, Tenn.—The Phoenix Savings Bank & Trust Co., capital \$25,000, has been incorporated by H. O. Fulton, W. B. Greenlaw, John A. Oakes, E. E. McLemore and Jo. L. Hutton.

Davis, Okla.—The Oklahoma State Bank, which succeeds the Merchants and Planters' Bank, has been chartered with \$35,000 capital; directors, S. H. Davis, James Draughon, H. L. Freeman, N. L. Hale, Jerril McCluskey and S. D. McCluskey, all of Davis; G. B. McCluskey of Muskogee.

Duncan, Okla.—Official: The First State Bank is a conversion of the First National Bank. C. H. Connell of Fort Worth, Texas, is one of the directors.

Gadsden, Ala.—The Alabama Bank & Trust Co. has begun business; capital \$50,000. W. H. Porter is president; Dr. C. L. Guice, first vice-president; R. E. Grace, second vice-president, and H. Reeves Howell, cashier.

Golden City, Mo.—The Golden City Banking Co. is reported organized with \$20,000 capital. Directors: H. H. Steel (president), W. P. Burns (vice-president), W. R. Crowther (cashier), James Houdyshell, J. B. McNaught, W. T. Clark and C. V. Sheppard.

Groesbeck, Texas.—The Continental State Bank, which succeeds the Continental Bank & Trust Co., has begun business; capital \$25,000; directors, J. G. Wilkinson, president; J. D. Whitcomb, vice-president; F. A. Collins, cashier; S. W. Hamilton and J. E. Willis.

Hearne, Texas.—The MANUFACTURERS' RECORD is officially informed the Hearne Building and Loan Association is not a new association, but that the charter was changed to conform with the present laws governing local building and loan companies; directors, Dr. H. W. Cummings, Phil Reily, S. E. Kenner, J. P. Ayers, R. W. Marshall, F. W. C. Karney, J. W. Matthews, W. W. P. Easterwood and J. E. Morris.

Jefferson City, Mo.—Chartered: Continental Insurance Co.; capital \$500,000; incorporators, W. W. Steel, F. M. Estes, H. W. Femmer, Grant Gissespie, W. R. Haight, F. X. Geroghty, John B. Carroll, Leo W. Grant, Felix Cornitius, Harry B. Gardner, C. Porter Johnson, Allen Hamilton, James P. Gardner and W. H. Douglass.

Kingfisher, Okla.—Reported that a \$30,000 State bank is to be established by George Newer.

Kingfisher, Okla.—Official: Kingfisher Building and Loan Association chartered; capital \$100,000; directors, S. L. Maxson, president; G. H. Laing, vice-president; H. F. Stephenson, secretary and manager; E. A. Pemberton, treasurer; M. W. Hinck, attorney; F. D. Dakin, J. S. Patrick, C. E. Moore, G. E. Moore and R. Pappe, all of Kingfisher.

Lohman, Mo.—Official: Farmers' Bank of Lohman incorporated; capital \$12,000; directors, F. W. Blochberger, president; W. E. Meyers, vice-president; J. A. N. Linhardt, cashier; A. S. Blochberger, J. H. Kautsch, W. Neiderwimmer and John Schepery.

Mart, Texas.—Reported that the First State Bank has changed hand and will open for business July 1; capital \$20,000; directors, W. W. Woodson, president; R. W. Bass, vice-president; A. P. Smyth, R. W. Bass, J. A. Gill, R. H. Swain, C. O. Leuschner, W. W. Woodson and J. B. Earl. A. E. Hander is cashier.

Mechanicsville, Md.—The National Bank of Mechanicsville has elected Jesse Turner, president; George M. Thomas, vice-president; Lemuel E. Mumford, second vice-president; E. M. Anderson, cashier; directors: Jesse Turner, Dr. Zach R. Morgan, James Edward Burroughs, Eugene Trice of Mechanicsville, Geo. M. Thomas, Charlotte Hall; Clarence Thomas, Charlotte Hall; William W. Earley, Brandywine; David T. Dixon, Laurel Grove; Dr. Robert V. Palmer, Palmers; Lemuel E. Mumford, Cape Charles, Va.; R. J. Long, Oraville, Md. An official letter received by the MANUFACTURERS' RECORD confirms the above. The bank will take over the building and fixtures of the private bank, "Bank of Mechanicsville."

Middlesboro, Ky.—The First State Bank, capital \$25,000, has been incorporated and organized with directors thus: President, A. T. Smith; vice-president, Dr. J. T. Evans; cashier, Dr. J. Letton Martin.

Moorefield, W. Va.—The Hardy County Bank of Moorefield has been incorporated with \$50,000 capital by Robert A. Wilson and A. W. Seymour of Moorefield, E. W. McNeill of Morgantown, W. Garnett of Mathias and W. H. Griffith of Keyser.

Muldrow, Okla.—Official: Bank of Sequoyah incorporated; capital \$15,000; I. H. Nakdimen, president, and W. L. Curtis, vice-president, both at Sallisaw, Okla., and A. W. Brownsfield, cashier, Muldrow, Okla.

Oklahoma City, Okla.—Frank J. Wycoff of Stillwater is reported to be organizing the Tradesman's State Bank. Business is expected to begin about September 7.

Okolona, Miss.—The Okolona Building and Loan Association, capital \$30,000, has been incorporated by R. W. Chandler, A. L. Jagoe, J. S. Rowe, W. E. Savage, C. R. King and R. J. West; directors, R. J. West, president; R. W. Chandler, vice-president; Jas. S. Rowe, W. E. Savage, Walter Smith, E. S. Elliott and C. R. King. A. L. Jagoe is secretary and treasurer.

Ovalo, Texas.—Official: First State Bank incorporated; capital \$10,000; incorporators, L. J. Brian, J. B. Wilkinson and P. T. Hurt.

Parkton, Md.—Official: First National Bank chartered; capital \$25,000; directors, John M. Little, Grant Almon, F. P. Lewin, J. G. Hoshall, J. C. Stifler, Geo. W. Carr and Jas. N. Frederick, all of Parkton, Md.; Howard M. Gore of Freeport, Md., and G. Albert Mays of Glenco, Md.

Plainview, Texas.—Official: Hale County Abstract Co. incorporated; capital \$20,000; John F. Sanders and others interested.

Red Rock, Okla.—Concerning the reported organization of the Farmers' Exchange Bank, H. L. Atherton, cashier, writes the MANUFACTURERS' RECORD: "This is simply an increase of capital, and not a new bank."

Sharon, S. C.—The MANUFACTURERS' RECORD is informed that Dr. Jos. H. Saye will be president of the \$25,000 national bank being organized. A press report gives the name of the institution as the First National, and organizers thus: J. H. Saye, J. S. Hartness, H. W. Shannon, S. B. Pratt and Kennedy Bros.

Tifton, Ga.—The MANUFACTURERS' RECORD is officially informed that the Georgia Loan & Abstract Co. will be incorpo-

rated and chartered with \$10,000 capital paid in; J. L. Brooks, president of the National Bank of Tifton, president, and E. U. Kendrick, cashier National Bank of Tifton, secretary and treasurer. The company will do a real-estate business, negotiate loans, etc.

Wagoner, Okla.—The Citizens' State Bank, capitalized at \$25,000, is reported being organized with W. B. Kane, president; A. F. Parkinson, vice-president, and Geo. D. Story, cashier. This is a reorganization of the City National Bank.

Warsaw, Va.—The Northern Neck State Bank, capital \$25,000 to \$50,000, incorporated; J. W. Chinn, Jr., president; R. Carter Wellford, vice-president; W. T. Tyler, cashier and secretary, all of Warsaw.

White Hall, Md.—A national bank is reported being organized by the White Hall Farmers' Club and Improvement Association.

Wister, Okla.—Official: First State Bank incorporated; capital \$10,000; John S. Traw, president; M. L. Harris, vice-president, and G. O. Nolley, cashier, all of Wister.

New Securities.

Albany, Texas.—May 15 election will be held to vote on \$20,000 of school district bonds.

Amite City, La.—Voted: \$30,000 of building bonds of school district No. 2. They are 10-year 5 per cents, and bids for same will be received until May 15.

Ardmore, Okla.—The Board of School Trustees is reported to have closed a deal with Fish, Robinson & Co. of Chicago for the purchase of \$160,000 of school bonds to be voted on May 8.

Arlington, Texas.—The Dallas Trust and Savings Bank of Dallas has been awarded at \$327.50 premium \$25,000 of 5 per cent. 20-40-year sewer bonds.

Baltimore, Md.—Bids will be received until noon May 17 for the following 4 per cent. loans: \$500,000 annex improvement, \$500,000 new fire-engine house, \$500,000 new schoolhouse and \$250,000 conduit. Address John M. Littig, president of the Board of Commissioners of Finance.

Beaufort, S. C.—Trowbridge & Niver Company of Chicago are said to be the purchasers of the \$43,000 of 5 per cent. 20-30-year water-works, electric-light and town hall bonds recently reported sold.

Belhaven, N. C.—The MANUFACTURERS' RECORD is informed that bids will be received until noon June 1 for \$16,000 of 5 per cent. 30-year Belhaven graded school district (Belhaven county) bonds. Address R. W. Lucas, secretary of Belhaven Graded Schools, Belhaven, N. C., or Wiley C. Rodman, attorney, Washington, D. C. A. L. Jagoe is secretary and treasurer.

Bethesda, Md.—May 17 an election is to be held to vote on \$25,000 of district road bonds.

Beulah, Miss.—Bids will be received until May 4 for \$7000 of 6 per cent. 20-year water-works bonds. J. B. Hughes is Mayor.

Bridgeport, W. Va.—The MANUFACTURERS' RECORD is informed that bids will be received until noon May 31 for \$12,000 of 5 per cent. Bridgeport (Harrison county) independent school district bonds. John Dunkin is secretary Board of Education.

Brighton, P. O. Bessemer, Ala.—Bids are being received at private sale for \$10,000 of 5 per cent. 30-year sewer bonds. L. B. Lanier is Mayor.

Bristol, Tenn.—The Legislature has authorized the city to issue \$100,000 of Bristol & Elizabethton Railroad and street-improvement funding bonds.

Burleson, Texas.—Voted: \$20,000 of school-building bonds.

Carthage, Texas.—Approved: \$15,000

of 4 per cent. 10-30-year Panola county bridge bonds.

Centreville, Tenn.—Bids will be received until 1 P. M. May 10 by A. F. Aydelett, judge of Hickman county, for \$30,000 of 4½ per cent. 5-20-year funding bonds.

Cleveland, Tenn.—The new city charter, which becomes effective May 1, provides for the issuing of \$35,000 of sewer bonds.

Crockett, Texas.—Approved: \$25,000 of 5 per cent. 20-40-year water-works bonds.

Dallas, Texas.—Approved: \$500,000 of reservoir and \$200,000 of school bonds.

Dinwiddie, Va.—Woodin, McNear & Moore of Chicago have been awarded at \$37.50 premium \$30,000 of 4½ per cent. 30-year bonds of Namozu and Rowart districts.

El Campo, Texas.—Reported that \$10,000 of 5 per cent. street-improvement bonds are being offered for sale by E. L. Correll.

El Reno, Okla.—Voted: \$50,000 of City Hall and \$200,000 of fire-station bonds.

Ensley, Ala.—The City Council has adopted a resolution providing for a \$175,000 bond issue.

Fairfield, Va.—May 11 election will be held to vote on district school-building bonds.

Fort Mill, S. C.—Voted: \$10,000 of school district building bonds.

Franklin, N. C.—May 15 an election will be held in Macon county to vote on \$12,000 of graded school district bonds.

Fulton, Mo.—Defeated: \$20,000 of street-improvement bonds at election.

Garden City, Mo.—Question of issuing \$30,000 of school district bonds reported under consideration.

Greenville, Tenn.—The election called for April 24 to vote on \$40,000 of water and light bonds is reported postponed indefinitely.

Grenada, Miss.—Voted: \$12,500 of school, \$5000 of water and light and \$10,000 of sewerage-extension bonds.

Hampton, Ga.—May 10 an election will be held to vote on \$20,000 of 5 per cent. water-works and electric-light bonds.

Haskell, Texas.—Approved: \$5000 of street-improvement, \$23,000 of water-works and \$7000 of sewerage 5 per cent. 20-40-year bonds.

Hawkinsville, Ga.—Bids will be received until May 27, inclusive, for \$15,000 of 5 per cent. 5-20-year municipal improvement bonds. J. F. Coney is chairman of the bond committee.

Heflin, Ala.—Authorized: Bonds for high-school building.

Hidalgo, Texas.—The \$75,000 of Hidalgo county courthouse and jail bonds, for which bids will be opened on May 12, are 10-40-year 5 per cents.

Joplin, Mo.—Reported that bids will be received until May 3 for \$40,000 of 5 per cent. refunding water bonds.

Krebs, Okla.—May 15 an election is to be held to vote on \$50,000 of water-works bonds.

Lawton, Okla.—Voted: \$125,000 of water-works and sewer-extension 5 per cent. 30-year bonds.

Lehigh, Okla.—Bids will be received until 7.30 P. M. May 15 by A. L. Russell, clerk Board of Education, for \$18,000 of 5½ per cent. 20-year school bonds.

Lexington, N. C.—At a good-roads convention of farmers and business men resolutions were adopted to issue \$500,000 of Davidson county bonds.

Lillington, N. C.—Fiske & Robinson of Chicago have purchased at \$1827 premium \$38,000 of 5 per cent. 10-30-year Harnett county bridge bonds.

Little Rock, Ark.—Reports state that [For Additional Financial News, See Pages 86 and 87.]

Southern Investments

100,000 \$ per cent. Industrial Bonds.
100,000 7 per cent. Preferred Stock.
100,000 of Common Stocks.
In strongest mill corporations.
Also 100,000 first mortgage real estate loans.
F. C. ABBOTT & CO.,
Charlotte, N. C.

Established 1835.

The Merchants National Bank

South and Water Sts., BALTIMORE, MD.
DOUGLAS H. THOMAS, President.
WM. INGLE, Vice-President and Cashier.
J. C. WANDS, Asst. Cashier.
JOHN B. DUNN, Asst. Cashier.
Capital, \$1,500,000
Surplus and Profits, - - - \$900,000
Deposits, \$12,000,000

Accounts of Banks, Bankers, Corporations and Individuals solicited. We invite correspondence.

JOHN NUVEEN & CO.

1st Nat. Bank Bldg., CHICAGO

We purchase SCHOOL, COUNTY and MUNICIPAL BONDS. Southern Municipal Bonds a Specialty.

Write us if you have bonds for sale.

THE FIRST NATIONAL BANK

OF KEY WEST, FLA.

United States Depository and Disbursing Agent
Capital, \$100,000
Surplus and Undivided Profits, - 40,000
A general banking business transacted.
Special attention given to collections.

DELAWARE TRUST CO.

WILMINGTON, DEL.

EDWARD T. CAMPY, President.
J. ERNEST SMITH, General Counsel and Vice-President.
HARRY W. DAVIS, Secretary.

Fully Equipped Department for the Organization of Corporations under advice of Counsel, and for the Registration of Corporations as required by the Delaware Law.

Represents over 500 Domestic and Foreign Corporations.
The Delaware Corporation Law is Broad, Liberal, Safe and Stable. Granting and annual taxes low.

Hugh MacRae & Co.

BANKERS

MISCELLANEOUS SOUTHERN SECURITIES
COTTON MILL STOCKS
WILMINGTON, N. C.
WASHINGTON, D. C. 400 Colorado Bldg.

WANTED**Southern Municipal Bonds**

Paving Bonds of Municipalities having over 5000 population.

F. J. LISMAN & CO.

Members New York Stock Exchange

30 Broad Street NEW YORK
HARTFORD BALTIMORE PHILADELPHIA

H. T. HOLTZ & CO.

COUNTY, CITY, TOWN AND SCHOOL BONDS

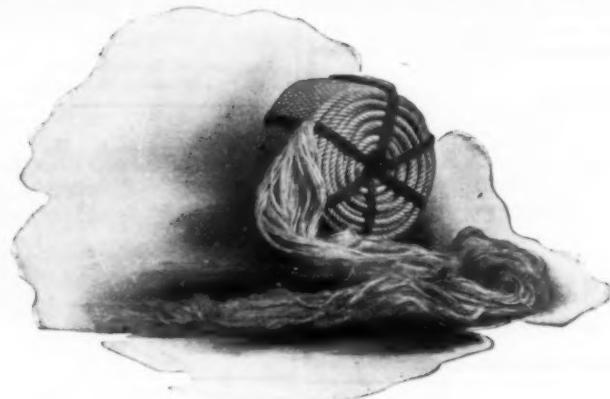
We solicit correspondence from Municipal officials relative to the purchase of new Bond issues, for which we are always in the market.

171 LA SALLE ST. CHICAGO

INVESTMENT SECURITIES

Southern Stocks and Bonds
Municipal and Corporation
Cotton Mill Stock a Specialty

WM. S. GLENN - Broker - SPARTANBURG, S. C.

"AMERICAN"**As Strong as Steel**

It is a fact not ordinarily realized by engineers and superintendents that pure manila hemp rope is, weight for weight, as strong as steel wire rope. The tensile strength of manila hemp is 50,000 per square inch.

"American" Transmission Rope

is wonderfully pliable owing to its thorough internal lubrication, and offers a means of power transmission more economical, positive, safe and reliable than can possibly be secured with belting of any kind.

It will pay you to familiarize yourself with the progress made in power transmission.

The American Manufacturing Co.

65 WALL STREET, NEW YORK CITY

TRANSMISSION ROPE

118

118

INTERNATIONAL TRUST CO.

OF MARYLAND

MAKES A SPECIALTY OF SOUTHERN BUSINESS
OUR BOARD OF DIRECTORS

Leading business men in Cotton, Iron, Railroad, Finance, Tobacco, Paper, Lumber, Copper, Dry Goods, Law, etc., constitute our twenty-four Directors—names that insure close supervision and safe leadership.

| | | |
|----------------------------|---|-----------------|
| GEO. W. WATTS..... | Capitalist and Director American Tobacco Co..... | Durham, N. C. |
| C. SIDNEY SHEPARD..... | Capitalist and Director Western Union Telegraph Co. New York. | Bethel, Md. |
| STEVENSON A. WILLIAMS..... | President Hartford National Bank..... | Cumberland, Md. |
| LLOYD LOWNDES..... | Vice-President Second National Bank..... | |
| SUMMERFIELD BALDWIN..... | Woodward, Baldwin & Co., Cotton Goods, and Vice-President National Exchange Bank (Baltimore)..... | Baltimore. |
| WM. C. SEDDON..... | Wm. C. Seddon & Co., Bankers and Brokers..... | Baltimore. |
| CHAS. K. OLIVER..... | President Consolidated Cotton Duck Co..... | Baltimore. |
| RICHARD H. EDMONDS..... | President Manufacturers' Record Pub. Co..... | Baltimore. |
| ISAAC H. DIXON..... | Smith, Dixon Co., Wholesale Paper Dealers..... | Baltimore. |
| J. W. MIDDENDORF..... | Middendorf, Williams & Co., Bankers and Brokers..... | Baltimore. |
| DAVID HUTZLER..... | Hutzler Brothers, Dry Goods..... | Baltimore. |
| JOS. OLENDENIN..... | Secretary Baltimore Copper Smelting & Rolling Co..... | Baltimore. |
| TOWNSEND SCOTT..... | Townsend Scott & Son, Bankers and Brokers..... | Baltimore. |
| B. HOWARD HAMAN..... | Gane & Haman, Attorneys at Law..... | Baltimore. |
| DE COURVOY W. THOM..... | President Maryland Portland Cement Co..... | Baltimore. |
| EDWARD N. RICH..... | Attorney-at-Law..... | Baltimore. |
| CHAS. T. WESTCOTT..... | Attorney-at-Law..... | Baltimore. |
| DOUGLAS H. GORDON..... | Vice-President..... | Baltimore. |
| SAMUEL C. ROWLAND..... | Sec'y and Treas. Maryland Portland Cement Co..... | Baltimore. |
| LORING A. COVER..... | Secretary-Treasurer..... | Baltimore. |
| CHARLES D. FENHAGEN..... | Editor St. Paul Dispatch..... | St. Paul, Minn. |
| CHARLES H. GRASTY..... | J. S. Wilson, Jr., & Co., Bankers..... | Baltimore. |
| J. SAWYER WILSON, Jr..... | R. C. Hoffman & Co..... | Baltimore. |
| JOHN T. HILL..... | | |

OFFICERS

DOUGLAS H. GORDON, President. SAMUEL C. ROWLAND, Vice-President.
SUMMERFIELD BALDWIN, Vice-President. CHAS. D. FENHAGEN, Sec'y and Treas.
WALTER D. FOCKE, Assistant Secretary and Assistant Treasurer.

THE BALTIMORE TRUST & GUARANTEE COMPANY

BALTIMORE, MD.

Capital, \$800,000
Surplus, \$2,100,000**THOS. H. BOWLES, President**

Acts as Executor, Administrator, Trustee, Receiver for Firms, Individuals or Corporations.

Receives Deposits subject to Check, and allows Liberal Rates of Interest thereon.

Bank of Richmond

Capital and Surplus, \$1,500,000

RICHMOND, VA.

JOHN SKELTON WILLIAMS, President.
FRED'K E. NOLTING, 1st Vice-President.
T. K. SANDS, 2d Vice-President and Cashier.
H. A. WILLIAMS, Assistant Cashier.
L. D. CRENSHAW, Jr., Trust Officer.

In aiding the development of legitimate business enterprises, this bank believes that it performs a required duty, and to this end offers the services of a live, progressive bank, conservatively managed.

WIL. F. BOCKMILLER, Pres. JOHN G. HULETT, Sec.

Baltimore Office Supply Co.

106 S. Eutaw St., Baltimore, Md.

MANUFACTURERS OF
Stamps, Stencils, Seals, Metal Signs, etc.
Office and Bank Supplies.

Write for prices.

MANUFACTURERS and JOBBERS

Frequently find it necessary to have BANKING FACILITIES in addition to those offered by local banks.

FIRST NATIONAL BANK OF RICHMOND, VA.

With assets of nine million dollars, offers just the additional facilities required.

Jno. B. Purcell, President.

Jno. M. Miller, Jr., Vice-Pres. and Cashier.

JOHN W. DICKEYSOUTHERN
SECURITIES**AUGUSTA, GEORGIA****The Delaware Fidelity Trust Co.**

Home Office—Dover, Delaware
Is especially interested in the development of the South and will assist substantial enterprises requiring additional capital.

Announces the opening of a branch office in the city of Philadelphia, where arrangements may be made for the organization and consolidation of corporations, registration of stock, and for acting as trustee in bond issues.

Correspondence solicited.
THE DELAWARE FIDELITY TRUST CO.
1415 Arch Street, Philadelphia, Pa.

The National Exchange Bank

OF BALTIMORE, MD.

Hopkins Place, German and Liberty Sts.

Capital, \$1,000,000

July 15, 1908, Surplus and Profits, \$671,631.60

OFFICERS

WALDO NEWCOMER, President.
SUMMERFIELD BALDWIN, Vice-Pres.
CHARLES W. DORMEY, Vice-Pres.
R. VINTON LANDALE, Cashier.
WM. J. DELCHER, Asst. Cashier.

Accounts of Mercantile Firms, Corporations, Banks, Bankers and Individuals Invited.

SOUTHERN SECURITIES

We own and offer high-grade investments, among which are:

6% COUPON NOTES NEW ORLEANS RAILWAY & LIGHT CO.**5% ALIMONY CERTIFICATES OF INDEBTEDNESS OF NEW ORLEANS**

WRITE FOR PARTICULARS

Interstate Trust & Banking Co.

NEW ORLEANS

Capital and Surplus Over \$1,000,000

6% Annual Interest 8%

Can furnish limited amount gilt-edge first mortgage paper on Birmingham improved real estate (where values are increasing very rapidly), bearing 6% to 8% annual interest, payable semi-annually. Correspondence invited.

MINGE MORTGAGE & REALTY CO., Capital paid in, \$10,000,
521-2 First Nat. Bank Bldg., Birmingham, Ala.

GO SOUTH!

Business Opportunities, Investment Securities, Real Estate, Timber, Mines, Industrial Properties and Mortgages in Southern States and Mexico, correspond with

METROPOLITAN INVESTMENT CO.

GEO. B. EDWARDS, Pres., Charleston, S. C.
New York Office, Tribune Bldg., Park Row and Nassau St. Branch Office in London, Eng.

Citizens' Loan & Trust Co.

HAWKINSVILLE, GA.

(Incorporated.)

\$25,000 PAID-IN CAPITAL

Correspondence solicited, especially with those seeking investments in South Georgia properties or wishing to loan on first mortgage security at 7 per cent. in this section.

CITY REAL ESTATE & SPECIALTY.

J. H. TAYLOR, President.
H. F. LAWSON, Sec'y and Treas.

SURETY BONDS**Fidelity & Deposit Co.**

OF MARYLAND

Home Office, - BALTIMORE, MD

Assets Over \$5,000,000

Pioneer Surety Co. of the South. Becomes Surety on bonds of every description.

AGENTS IN ALL PRINCIPAL CITIES.

HARRY NICODEMUS, EDWIN WARFIELD, President.
Sec'y and Treas.

MANUFACTURERS' RECORD.

it is proposed to make the whole city an improvement district and issue \$200,000 of bonds as follows: Electric-light plant, \$65,000; city hospital, \$50,000; fire-station, \$50,000, and \$35,000 for equipping fire stations and furnishing hospital.

Longview, Texas.—Voted: \$40,000 of school bonds.

Lockhart, Texas.—Voted: \$50,000 of 40-year Caldwell county road bonds.

Lubbock, Texas.—Voted: \$25,000 of school-building bonds.

Malvern, Ark.—The MANUFACTURERS' RECORD is informed that about \$25,000 of Hot Springs county scrip will be issued and sold at a discount. D. S. Bray is circuit clerk.

Marshall, N. C.—The \$20,000 of water, sewer and street bonds are reported sold.

Mart, Texas.—Approved: \$50,000 of 5 per cent. 20-40-year water-works bonds, recently sold.

Martin, Tenn.—Voted: \$30,000 of 5 per cent. 5-20-year street-improvement bonds.

Maxwell, Texas.—Voted: \$50,000 of 5 per cent. 40-year road bonds.

Mayfield, Ky.—At 2 P. M. May 10 A. S. Anderson, Mayor, will sell at auction \$75,000 of 1-19-year school-building bonds, interest not to exceed 5 per cent.

McKinney, Texas.—May 31 city will vote on \$20,000 of street-improvement bonds.

Meridian, Miss.—The Union Bank & Trust Co. of Meridian was awarded at \$3375 premium \$250,000 of City Hall and water-works bonds.

Memphis, Tenn.—The city has been authorized by the Legislature to issue \$260,000 of fire and police station bonds.

Montgomery, Ala.—All bids received for \$125,000 of street-paving bonds were rejected, and new bids will be received until noon May 17.

Monticello, Miss.—Reported that \$50,000 of 4 per cent. Lawrence county courthouse bonds will be issued.

Mt. Olive, Miss.—Voted: Bonds for electric-light plant.

Natchez, Miss.—Preparations reported being made by the Council to issue \$47,500 of 5 per cent. 30-year refunding bonds.

New Haven, Mo.—Defeated: Election to vote on \$75,000 of courthouse and jail bonds.

Newnan, Ga.—Voted: \$16,000 of 5 per cent. school bonds. As soon as the necessary preliminaries shall have been complied with the bonds will be offered for sale.

Newport, Ky.—The Newport National Bank is reported to have purchased at \$250 premium \$2800 of 5 per cent. sewerage bonds.

Newport, Tenn.—B. W. Hooper, secretary, writes the MANUFACTURERS' RECORD confirming the report that E. H. Rollins & Sons of Chicago have been awarded the \$200,000 of 5 per cent. Cocke county road bonds; premium \$15,000.

Newton, Ala.—W. B. Mitchell, secretary Newton Baptist Collegiate Institute, writes the MANUFACTURERS' RECORD that the date for receiving bids for the \$16,000 of school-building and improvement bonds has been postponed until May 15.

Newton, Okla.—A. J. McMahan of Oklahoma City is reported to have been awarded an issue of 5 per cent. 20-year Okmulgee county funding bonds.

Orton, Ark.—Reported that it is proposed to issue \$60,000 of Orton levee district bonds.

Paragould, Ark.—W. S. Coleman & Sons and the Southern Construction Co. of Paragould have purchased at par \$65,000 of 6 per cent. drainage bonds of Eight-Mile Ditch No. 2 and Johnson Creek Ditch No. 1, Greene county. The purchasers are said to be the contractors for the work.

Parkersburg, W. Va.—The MANUFACTURERS' RECORD is informed that bids will be received until 3 P. M. June 1 by H. H. Moss, Jr., S. D. Camden, Wm. M. Hall and B. S. Pope, commissioners, for \$270,000 of 4 per cent. 20-year water-works bonds.

Pascagoula, Miss.—Jackson county is reported to be considering a \$25,000 road-bond issue.

Patterson, La.—Bids are reported being received by the finance committee for \$30,000 of 5 per cent. water-works construction bonds.

Perry, Fla.—The MANUFACTURERS' RECORD is informed that bids will be received until noon May 20 by the Board of Trustees, John C. Calhoun, clerk, for \$15,000 of sewer and \$15,000 of street-improvement 5 per cent. 30-year bonds.

Pine Bluff, Ark.—Robert M. Foster of

St. Louis is reported to have purchased \$20,000 of Jefferson county levee bonds.

Raleigh, N. C.—The MANUFACTURERS' RECORD is informed that bids will be received by L. B. Pegram, county treasurer, until noon June 7 for \$20,000 of 5 per cent. 20-year Wake county bonds.

Richmond, Va.—The ordinance providing for the issue of \$1,500,000 of 4 per cent. bonds is for the following improvements: Sewers, \$944,000; water mains, \$210,000; high-school completion, \$275,000; graded schools, \$71,000.

Richmond, Mo.—John B. Clark, treasurer of Ray county, is receiving bids for \$25,000 of 5 per cent. poorhouse construction bonds.

Riverside, P. O. Fort Worth, Texas.—Reported that the election to vote on \$8000 of school district building bonds has been postponed from May 1 to May 18.

Roscoe, Texas.—Voted: \$10,000 of school district bonds.

Rotan, Texas.—Bids will be received until May 27 by L. C. Miller, secretary

STEEL PLATE

and

STEEL DIE
LETTER HEADS—

Beautifully designed
Graceful in form
Perfectly executed
Their use will give a dignity
to your correspondence which
will surely bring you business.

YOUNG & SELDEN CO.
BALTIMORE, MD.

We will be glad to send samples
—Their beauty of design, as
well as their very moderate
price will certainly interest
you.

CROSS CREEK COAL COMPANY 6% Gold bonds, total issue \$250,000. All have been disposed of to investors and bankers in different parts of the country, including Saco, Maine; Boston, Mass.; Rochester, N. Y.; Westfield, Olean, Fredonia and Buffalo, N. Y.; Franklin, Coudersport, Pittsburgh, Smethport, Shamokin and Port Allegany, Pa.; Columbus, Dayton and Springfield, Ohio; Northfork, Welch and Bluefield, W. Va.; Roanoke, Va.; Nashville, Knoxville, Jasper, Chattanooga and South Pittsburg, Tenn.; Atlanta, Ga.; Lowell, Mass.; East Orange, N. J., and Washington, D. C., until now there are but \$30,000 of them left. These bonds are first lien on 7000 acres of the best coal properties in Tennessee, and \$75,000 of this money is being spent on an up-to-date coal works with a capacity of about 1000 tons a day. Particulars will be furnished from the office, 1006 Mutual Life Building, Buffalo, N. Y. P. S.—A bonus of preferred stock will be given with the bonds.

FISK & ROBINSON
BANKERS
Government Bonds
Investment Securities

Members New York Stock Exchange

SPECIAL LIST OF CURRENT
OFFERINGS ON APPLICATIONNEW YORK BOSTON CHICAGO
35 Cedar St. 28 State St. 115 Adams St.P. O. Box 396 Cable: Merfle.
MAYAGUEZ, PORTO RICO.

The only mercantile agency in Porto Rico. All sorts of claims for collection. Credit reports. Adjustments. Information on business opportunities. We do business all over the island.

THE RAMFEL MERCANTILE AGENCY

307 Charleston National Bank Building

DAVID A. JAYNE

Consulting Accountant, Auditor

AND DEVISER OF
BUSINESS SYSTEMS

CHARLESTON, WEST VIRGINIA

Coal, Lumber, Railroad, Banking, Municipal
and Commercial Accounting.

PRINTING

BINDING

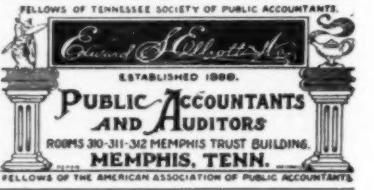
BANK
RAILROAD
STEAMBOAT
COMMERCIAL

BURKE & GREGORY
NORFOLK, VA.

THE Board of Directors of The American Cotton Oil Company on May 4, 1909, declared a semi-annual Dividend of THREE PER CENT. upon the Preferred Stock of the Company, payable June 1, 1909, at the Banking-house of Winslow, Lanier & Company, 59 Cedar street, New York city.

The Preferred Stock Transfer Books of the Company will be closed on May 15, 1909, at 12 o'clock noon, and will remain closed until June 2, 1909, at 10 o'clock A. M.

JUSTUS E. RALPH, Secretary.



FELLOWS OF THE AMERICAN ASSOCIATION OF PUBLIC ACCOUNTANTS

THE AMERICAN AUDIT CO.

THOS. P. HOWARD, C. P. A., Resident Manager.

Mutual Building, RICHMOND, VA.

Our reports are accepted by the leading financiers of the world,
and are frequently made the basis of credit.

Home Office, 100 Broadway, New York

Branches in all Principal Cities

OFFICE STATIONERY

We make a specialty of high-class stationery. A trial is all we ask.

J. P. BELL COMPANY,
LYNCHBURG, VA.

CONDENSED REPORT TO COMPTROLLER

The First National Bank of Birmingham, Ala.

WEDNESDAY, APRIL 28, 1909.

RESOURCES.

| | |
|-------------------------------|----------------|
| Loans and Discounts..... | \$5,685,050.35 |
| Overdrafts..... | 4.37 |
| U. S. Bonds and Premiums..... | 1,127,500.00 |
| State of Alabama Bonds.... | 186,900.00 |
| Other Stocks and Bonds.... | 223,700.00 |

CASH.

| | |
|--------------------------|---------------------|
| In Vault..... | \$ 914,296.02 |
| With Banks.... | 2,049,712.80 |
| With U. S. Treasurer.... | 61,050.00 |
| | \$3,025,058.82 |
| | \$10,248,213.54 |

Officers:

W. P. G. HARDING, President.

J. H. WOODWARD, Vice-President.

J. H. BARR, Vice-President.

THOMAS HOPKINS, Cashier.

F. S. FOSTER, Assistant Cashier.

THOS. BOWRON, Assistant Cashier.

J. E. OZBURN, Secretary Savings Department.

The First National Bank has been closely identified with the vital interests of Birmingham, commercial, industrial and civic, for twenty-five years, and during the last ten years its activities have covered the entire State of Alabama, and its connections in all parts of the United States make it a National Bank in fact, as well as by charter name.

With its large capital and surplus, conservative directorate, progressive management, ample equipment and central location, it is prepared to handle satisfactorily all business entrusted to it, and solicits accounts from responsible firms, corporations and individuals who may desire to extend their banking facilities.

CAREFUL ATTENTION GIVEN TO COLLECTIONS.

School Board, for \$18,000 of 5 per cent. 20-40-year school bonds.

San Angelo, Texas.—Approved: The \$32,000 of school bonds, for which bids will be received until June 5.

Sarasota, Fla.—John Nuveen & Co. of Chicago have been awarded at \$26 premium \$25,000 of 6 per cent. 30-year street improvement bonds.

Seymour, Texas.—It is stated that the \$25,000 of water and \$10,000 of sewer 5 per cent. 10-40-year bonds, recently voted, will soon be placed on the market.

St. Albans, W. Va.—Voted: \$5000 of City Hall bonds.

Stigler, Okla.—Reported that R. J. Edwards of Oklahoma City has purchased at private sale \$17,000 of 6 per cent. school district building bonds.

Temple, Texas.—Fiske, Robinson & Co. of Chicago have been awarded at \$3325 premium \$50,000 of 5 per cent. 20-40-year paving bonds.

Tulsa, Okla.—Bids will be received by E. B. Cline, city auditor, until May 7 for \$65,000 of 5 per cent. 20-year public improvement bonds.

Union, Mo.—Defeated: Election held in Franklin county to vote on \$75,000 of courthouse and jail bonds.

Vidalin, Ga.—Reported sold: \$9000 of 5 per cent. 30-year water-improvement bonds.

Warsaw, Ky.—Reported that \$12,000 of 5 per cent. 20-year Gallatin county bonds have been purchased by the Harris Trust and Savings Bank of Chicago at \$888 premium.

Waxahachie, Texas.—Reported that an election is to be held in Ellis county to vote on \$50,000 of courthouse bonds.

Waycross, Ga.—Ware county is reported to be considering a \$200,000 bond issue for roads and jail.

Weston, W. Va.—May 4 an election is to be held to vote on \$70,000 of 4 per cent. 10-20-year district school bonds. A. A. Arnold is president Board of Education.

Woodruff, S. C.—May 18 school district No. 33 will vote on \$5000 of bonds. E. F. Pearson, S. D. Parsons and J. B. Kilgore are school trustees.

At Raleigh, N. C., bids will be received until noon June 7 for \$20,000 of 5 per cent. 20-year Wake county bonds. *Further particulars will be found in the advertising columns.*

At Parkersburg, W. Va., bids will be received until 3 P. M. June 1 for \$270,000 of 4 per cent. 20-year water-works bonds. *Further particulars will be found in the advertising columns.*

At Baltimore, Md., bids will be received until noon May 17 for \$1,750,000 of registered 4 per cent. city stock as follows: Annex improvement, \$500,000; new fire-engine house, \$500,000; schoolhouse, \$500,000; conduit, \$250,000. *Further particulars will be found in the advertising columns.*

At Belhaven, N. C., bids will be received until noon June 1 for \$16,000 of 5 per cent. 30-year Belhaven graded school district (Beaufort county) bonds. *Further particulars will be found in the advertising columns.*

At Perry, Fla., bids will be received until noon May 20 for \$15,000 of sewer and \$15,000 of street-improvement 5 per cent. 30-year bonds. *Further particulars will be found in the advertising columns.*

Financial Notes.

The Bank of Seminary at Seminary, Miss., is reported to be doing business in its new home at Watts and Main streets.

The American Cotton Oil Co. has declared a semi-annual dividend of 3 per cent. upon its preferred stock, payable June 1. Justus E. Ralph is secretary.

Reported the consolidation of the First National and the West Virginia National banks of Huntington, W. Va., has been consummated, and that business is now being done under the name of the First Trust Company & Savings Bank.

Use us as Commercial Glasses. If there is anything weak in your bookkeeping department, anything wrong with your accounts, we will find it. If there is any way to open up new avenues of profits by improving upon old methods, we will find that, too—and our findings we hold in inviolate secrecy.

The terms are moderate. Write us.

THE AUDIT COMPANY OF NEW YORK

"THE OLDEST AND FOREMOST"

165 Broadway, New York

EDWARD T. PERINE,
President

F. C. RICHARDSON,
Sec'y and Treas.

BRANCHES:

Atlanta
Boston

Chicago
Rochester

Philadelphia
Pittsburg

RICHARD A. BLYTHE COTTON WARPS AND YARNS

No. 114 Chestnut Street, PHILADELPHIA, PA.

1018 Century Bldg., Atlanta, Ga., W. H. Harris, Representative.
Hawes Bros. & Blythe, Fall River, Mass.

PAULSON, LINKROUM & CO.

COMMISSION MERCHANTS

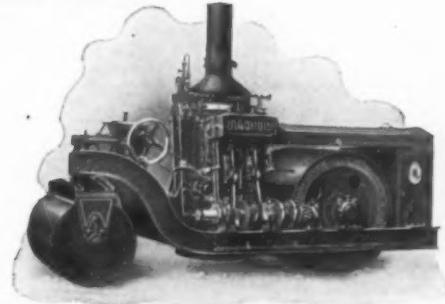
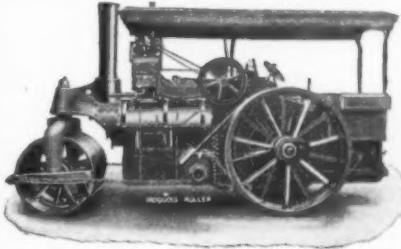
COTTON YARNS

NEW YORK
87-89 Leonard Street

PHILADELPHIA
120 Chestnut Street

CHICAGO
186 Market Stree.

THE IROQUOIS IRON WORKS STEAM ROLLERS



COTTON DUCK Consolidated Cotton Duck Co.

MANUFACTURERS OF

Cotton Duck of All Widths and Weights

ALSO

Yarns, Twine, Cotton Rope, Etc.

General Offices, Continental Trust Bldg.,
BALTIMORE, MD.

THE AMERICAN STANDARD

FIFTEEN YEARS EXPERIENCE

BUFFALO, N. Y.

ALPHABETICAL INDEX OF ADVERTISERS.

Ads. marked * appear every other week. Ads. marked † appear in first issue of the month. Ads. marked ‡ not in this issue.

FOR "CLASSIFIED OPPORTUNITIES" See Pages 90 and 91

| | | | | | | | | | | | | |
|---|--|-----|--|-----|--|-----|---|-----|---|-----|--------------------------------|-----|
| A | Abbott & Co., F. C. | 85 | Calhoun, John C. | 92 | Dufur & Co. | 41 | Indiana Mach. & Supply Co. | 134 | Milwaukee Corrugating Co. | 47 | Robins Conveying Belt Co. | 23 |
| | Abendroth & Root Mfg. Co. | 5 | Cameron Septic Tank Co. | 24 | Dunning, W. D. | 50 | Indianapolis Switch & Frogs Co. | 100 | Robins & Co., A. E. | 130 | Robins & Co. | 130 |
| | Abrasive Material Co. | 49 | Cameron Stm. Pump Works Co. | 125 | DuPont De Nemours Powder Co., E. I. | 1 | Industrial Lumber Co. | 121 | Robinson & Son Co., Wm. G. | 13 | Robinson & Orr. | 98 |
| | Albany Steam Tram Co. | 116 | Cameron McLellan Co., The | 24 | Eaton Steel Co. | 107 | Mississippi Valley Construc-tion Co. | 107 | Rock Island-Frisco Lines. | 131 | | |
| | Albion Condenser Co. | 1 | Canton Bridge Co. | 41 | Inland Mfg. Co. | 18 | Mitchell Oil & Gas Co. | 103 | Roehling's Sons Co., John A. | 51 | | |
| | Alberter Pump Co. | 127 | Canton Culvert Co. | 126 | International Car Co., The | 102 | Moffatt Machinery Co. | 19 | Rogers, Brown & Co. | 52 | Roger-Star Co., The. | 34 |
| | Alpha Photo-Engraving Co. | 123 | Caproni, Grant Ally. | 24 | International Creosoting & Construction Co. | 121 | Monarch Road Roller Co. | 101 | Roe, C. B. M. | 131 | Roe, C. B. M. | 131 |
| | Alpha Portland Cement Co. | 121 | Carborundum Co. | 117 | International Filter Co. | 15 | Monitor Stim. Gene's Mfg. Co. | 97 | Rosemont, Reddaway Bellng. & Hoss Co. | 20 | Rosemont, MacGovern & Co. | 97 |
| | Alpha Slate Co., The. | 24 | Cardwell, Machine Co. | 135 | International Trust Co. of Md. | 183 | Moran Flexible Slim. Joint Co. | 12 | Roseland Telegraphic Co. | 8 | | |
| | Alisir Engineering Co., J. R. | 118 | Carr, S. S. | 109 | Interstate Audit Co. | 95 | Morris & Co. | 3 | Roxburyford Fdry. & Mch. Co. | 1 | | |
| | Aluminum Co. of America. | 116 | Carter Electric Co., W. E. | 143 | Interstate Trust & Bank'g Co. | 29 | Morris, Abbott & Co. | 94 | Rucker, B. Parks. | 24 | | |
| | American Air Compress. Wks. | 107 | Carter Electric Co. | 143 | Ironton Portland Cement Co. | 29 | Morse Chain Co. | 23 | Ruggles-Coles Engineering Co. | 28 | | |
| | American Audit Co., The. | 96 | Carver Corp. | 121 | Jackson Lumber Co., E. E. | 97 | Morse Twist Drill & Mach. Co. | 49 | Russell, Burdsall & Ward Bolt & Nut Co. | 10 | | |
| | American Blower Co. | 108 | Carver Corp. | 121 | Jayne, David A. | 86 | Morris Iron Works Co. | 5 | Russell-Compton Co. | 15 | | |
| | American Bolting Cloth Co. | 118 | Carver Corp. | 121 | Jefferson Powder Co. | 87 | Murphy Company, John. | 144 | Sabel Bros. | 101 | | |
| | American Bridge Company of New York. | 40 | Carver Corp. | 121 | Jeffrey Mfg. Co. | 23 | Murphy Iron Works Co. | 5 | Sachemaster, George. | 97 | | |
| | American Cast Iron Pipe Co. | 128 | Carthage Superior Limestones Co. | 27 | Jenkins, George W. | 100 | Nashua Mfg. Co. | 21 | Saco & Fette Machine Shops. | 137 | | |
| | American Cement Co. | 108 | Cartidge Coll Co. | 1 | Jewett, Bigelow & Brooks. | 97 | Salem Foundry & Mch. Wks. | 98 | Safety Car Heat & Light Co. | 111 | | |
| | American Cement & Pump Co. | 107 | Carver Corp. | 121 | Johns-Manville Co., H. W. | * | Samuel, Frank. | 98 | Schaginaw Mfg. Co. | 21 | | |
| | American Coal Oil Co. | 135 | Carver Corp. | 121 | Jones, Charles F. | 95 | Sauer, A. | 95 | Schaeffer's Sons, D. | 111 | | |
| | American Engine Co. | 1 | Carver Corp. | 121 | Jones, E. K. | 102 | Savannah Blow Pipe Co. | * | Savannah Loco. Wks. & Sup. Co. | 102 | | |
| | American Frog & Switch Co. | 100 | Carver Corp. | 121 | Jones, F. J. | 44 | Scaife & Sons Co., W. B. | 15 | Schaeffer's Sons Co., W. B. | 15 | | |
| | American Hoist & Derrick Co. | 113 | Carver Corp. | 121 | Jones & Laughlin Steel Co. | 38 | Schenck, C. A. | 94 | Schenck, C. A. | 94 | | |
| | American Iron Steel Mfg. Co. | 10 | Carver Corp. | 121 | Jones & Co., L. E. | 41 | Self Lift Bridge Co. | 41 | Schlieren Co., Chas. A. | 17 | | |
| | American Laundry Machinery Mfg. Co. | 121 | Castell, Charles. | 9 | Kaiser, Louis E. | 89 | Schmidl & Sons Co., J. S. | 144 | Schmidl & Sons Co., J. S. | 144 | | |
| | American Locomotive Co. | 105 | Cattell, Charles. | 9 | Kander, O. H. | 94 | Schreiber & Sons Co., L. | 2 | Schreiber & Sons Co., L. | 2 | | |
| | Amerian Luxfer Prism Co. | 46 | Central Foundry Co. | 128 | Kansas City Elevator Mfg. Co. | 23 | Schroeder, George G. | 42 | Schroeder, George G. | 42 | | |
| | American Machine Co. | 21 | Central Metal & Supply Co. | 4 | Keeeler Co. | 8 | Schu-Miller Lumber Co. | 95 | Schuh-Miller Lumber Co. | 95 | | |
| | American Mch. & Mfg. Co. | 136 | Central of Georgia Railway. | 139 | Kelley Mfg. Co. | 36 | Schwab Bros. & Co. | 94 | Schwab Bros. & Co. | 94 | | |
| | American Pipe Mfg. Co. | 1-8 | Chairman of Board of Bond Trustees. | 91 | Kelley Metal Co. & Mfg. Co. | 8 | S. J. Wire Cloth Co. | 42 | Scott Mfg. Co. | 34 | | |
| | American Process Co. | 1 | Findley & Deposit Co. of Md. | 85 | Kelley Metal Co. & Mfg. Co. | 8 | Newman Machine Co. | 132 | Scott Roofing & Mfg. Co. | 46 | | |
| | American Valley Co. | 21 | Fletcher, Howard. | 24 | Kelley Metal Co. & Mfg. Co. | 8 | New Orleans Roof. & Metal Wks. | 44 | Scott Williams. | 136 | | |
| | American Priterizer Co. | 118 | Fitzgerald, Howard. | 24 | Kelley Metal Co. & Mfg. Co. | 8 | Newport News Shipbuilding & Dry Dock Co. | 2 | Selby, All Line Railway. | 139 | | |
| | American Railway Supply Co. | 120 | Fitzgerald, Howard. | 24 | Kelley Metal Co. & Mfg. Co. | 8 | New York Cent. Jewell Fil. Co. | 15 | Selby, Green Portable. | 25 | | |
| | American Rolling Mill Co. | 1 | Fitzgerald, Howard. | 24 | Kelby Corp. | 2 | North American Metaline Co. | 19 | Selby, Green Portable. | 25 | | |
| | American Safety Lamp, Mine & Supply Co. | 3 | Fleet-McGinley Co. | 140 | Kilbourn, F. | 124 | Norfolk & Southern Rwy. Co. | 140 | Sentor Manufacturing Co. | 4 | | |
| | Amer. Saw Mill Mch. Co. | 131 | Flexible Compound Co. | 21 | Kilbourn, F. | 124 | Seyfert's Sons, Inc., L. F. | 97 | Seyfert's Sons, Inc., L. F. | 97 | | |
| | American School of Correspondence. | 4 | Flory, C. A. | 121 | Kilbourn, F. | 124 | Shand Engineering Co. | 21 | Shand Engineering Co. | 21 | | |
| | American Sheet & Tin Plate Co. | 46 | Ford, Gen. Eng. Co. | 1 | Kirkpatrick, E. | 14 | Shelby Steel Tube Co. (see Na-tional Tube Co.) | * | Shelby Steel Tube Co. (see Na-tional Tube Co.) | * | | |
| | American Spiral Pipe Works. | 128 | Fox, Mfg. Co. | 123 | Kirkpatrick, E. | 14 | Shepherd Engineering Co. | 89 | Shepherd Engineering Co. | 89 | | |
| | American Steel & Wire Co. | 32 | Fox, M. Ewing. | 24 | Kirkpatrick, E. | 14 | Shields, W. S. | 21 | Shields, W. S. | 21 | | |
| | American Stone Co. | 27 | Frost, John. | 24 | Kirkpatrick, E. | 14 | Shimer & Sons, Samuel J. | 132 | Shimer & Sons, Samuel J. | 132 | | |
| | American Supply Co. | 1 | Gaines, Signal Oil Co. | 13 | Kirkpatrick, E. | 14 | Kirwan-Robins Supply Co. | 96 | Simpson Rayl. Co. | 25 | | |
| | American Spiral Pipe Works. | 128 | Gaines-Signal Oil Co. | 13 | Kirkpatrick, E. | 14 | Simpson Rayl. Co. | 25 | Simpson Rayl. Co. | 25 | | |
| | American Water Softener Co. | 15 | Galt & Son, John. | 44 | Kirkpatrick, E. | 14 | Sinclair Laundry Mach'y Co. | 121 | Sinclair Laundry Mach'y Co. | 121 | | |
| | American Well Works. | 129 | Gandy Belting Co. | 19 | Kirkpatrick, E. | 14 | Norton Co. | 109 | Sinclair Scott Co. | 19 | | |
| | Ames & Co., W. | 10 | Gandy Belting Co. | 19 | Kirkpatrick, E. | 14 | Nuvaculite Paving Co. | 3 | Sinnamahoning Power Mfg. Co. | 9 | | |
| | Anderson, South Carolina. | 128 | Gardner, Governor. | 109 | Kirkpatrick, E. | 14 | Nuvaculite Paving Co. | 3 | Sirocco Engineering Co. | 105 | | |
| | Anderson Machine & Foundry Co. | 116 | Gates & Crellin Co. | 109 | Kirkpatrick, E. | 14 | Ober Mfg. Co. | 132 | Sirrine, J. E. | 25 | | |
| | Andrews, Perry. | 130 | Gates & Crellin Co. | 109 | Kirkpatrick, E. | 14 | Ober Mfg. Co. | 132 | Sitler, Owner, c. o. Manufactur-ers' Record. | 95 | | |
| | Aquabur Co. | 36 | Gates & Crellin Co. | 109 | Kirkpatrick, E. | 14 | Ohio Elevator & Machine Co. | 41 | Skillin & Richards Mfg. Co. | * | | |
| | Armitage Mfg. Co. | 44 | Gates & Crellin Co. | 109 | Kirkpatrick, E. | 14 | Old Dominion Land Co. | 141 | Smead, W. H. | 24 | | |
| | Arnold Co. | 24 | Gates & Crellin Co. | 109 | Kirkpatrick, E. | 14 | Oliver Mfg. Co. | 100 | Smith-Courtry Co. | 4 | | |
| | Arundel Sand & Gravel Co. | 27 | Gates & Crellin Co. | 109 | Kirkpatrick, E. | 14 | Otis Elevator Co. | 36 | Smith-Courtry Co. | 27 | | |
| | Atlas Green Lime Co. | 1 | Gates & Crellin Co. | 109 | Kirkpatrick, E. | 14 | Owego Bridge Co. | 40 | Smythe Co., S. B. | 25 | | |
| | Atlas Machine Co. | 1 | Gates & Crellin Co. | 109 | Kirkpatrick, E. | 14 | P. A. D. c. o. Manufacturers' Record. | 97 | Snead Architectural Iron Wks. | 42 | | |
| | Atlas Portland Cement Co. | 29 | Gates & Crellin Co. | 109 | Kirkpatrick, E. | 14 | Somerset Coal Co. | 1 | Somerville, S. W. | 95 | | |
| | Audit Co. of New York. | 107 | Gates & Crellin Co. | 109 | Kirkpatrick, E. | 14 | Southern Lime Feed Works. | 95 | Southern Lime Feed Works. | 95 | | |
| | Austin Mfg. Co. | 1 | Gates & Crellin Co. | 109 | Kirkpatrick, E. | 14 | Southern Lime & Cement Co. | 30 | Southern Lime & Cement Co. | 30 | | |
| | Austin-Western Co., Ltd. | 101 | Gates & Crellin Co. | 109 | Kirkpatrick, E. | 14 | Southern L. & M. Starn. | 105 | Southern L. & M. Starn. | 105 | | |
| | Avery Co. | 1 | Gates & Crellin Co. | 109 | Kirkpatrick, E. | 14 | Southern Metal Crossings Co. | 100 | Southern Metal Crossings Co. | 100 | | |
| B | Babcock & Wilcox Co. | 5 | Gates & Crellin Co. | 109 | Kirkpatrick, E. | 14 | Southern Pipe Covering Co., Ltd. | 121 | Southern Pipe Covering Co., Ltd. | 121 | | |
| | Bader & Sons Co., E. B. | 19 | Gates & Crellin Co. | 109 | Kirkpatrick, E. | 14 | Southern States Port. Oceo. | 28 | Southern States Port. Oceo. | 28 | | |
| | Bailey-Lebby Co. | 19 | Gates & Crellin Co. | 109 | Kirkpatrick, E. | 14 | Southern States Supply Co. | 127 | Southern States Supply Co. | 127 | | |
| | Balor, Jas. H. | 96 | Gates & Crellin Co. | 109 | Kirkpatrick, E. | 14 | Southwark Fdy. & Mch. Co. | 1 | Southwark Fdy. & Mch. Co. | 1 | | |
| | Baldwin Equip. & Supply Co. | 100 | Gates & Crellin Co. | 109 | Kirkpatrick, E. | 14 | Ferdin. Frecker. | 96 | Ferdin. Frecker. | 96 | | |
| | Baldwin Locomotive Works. | 105 | Gates & Crellin Co. | 109 | Kirkpatrick, E. | 14 | Feter & Son, James. | 24 | Feter & Son, James. | 24 | | |
| | Baltimore Audit Co. | 1 | Gates & Crellin Co. | 109 | Kirkpatrick, E. | 14 | Petroleum Eng. Co. | 150 | Petroleum Eng. Co. | 150 | | |
| | Baltimore Bridge Co. | 20 | Gates & Crellin Co. | 109 | Kirkpatrick, E. | 14 | Pew, Arthur. | 24 | Pew, Arthur. | 24 | | |
| | Baltimore Bridge Co. | 40 | Gates & Crellin Co. | 109 | Kirkpatrick, E. | 14 | Pfannenstiel Eng. Co. | 95 | Pfannenstiel Eng. Co. | 95 | | |
| | Baltimore Cooperage Co. | 129 | Gates & Crellin Co. | 109 | Kirkpatrick, E. | 14 | Phillips Pressed Steel Pulley Co. | 21 | Phillips Pressed Steel Pulley Co. | 21 | | |
| | Baltimore Office Supply Co. | 129 | Gates & Crellin Co. | 109 | Kirkpatrick, E. | 14 | Standard Paint Co. | 45 | Standard Paint Co. | 45 | | |
| | Baltimore Steam Packet Co. | 41 | Gates & Crellin Co. | 109 | Kirkpatrick, E. | 14 | Standard Portland Cement Co. | 29 | Standard Portland Cement Co. | 29 | | |
| | Baltimore Trust & Guaranty Co. | 85 | Gates & Crellin Co. | 109 | Kirkpatrick, E. | 14 | Standard Scale & Supply Co. | 134 | Standard Scale & Supply Co. | 134 | | |
| | Bartlett & Snow Co., C. O. | 19 | Gates & Crellin Co. | 109 | Kirkpatrick, E. | 14 | Standard Steel Works. | 105 | Standard Steel Works. | 105 | | |
| | Barwood Leather Gasket Mfg. Co. | 85 | Gates & Crellin Co. | 109 | Kirkpatrick, E. | 14 | Star Expansion Bolt Co. | 10 | Star Expansion Bolt Co. | 10 | | |
| | Bates Sons, Jones. | 19 | Gates & Crellin Co. | 109 | Kirkpatrick, E. | 14 | Starrett Co., L. S. | 27 | Starrett Co., L. S. | 27 | | |
| | Bellomy, Johnson, Jr. F. | 40 | Gates & Crellin Co. | 109 | Kirkpatrick, E. | 14 | Steel Protected Concrete Co. | 33 | Steel Protected Concrete Co. | 33 | | |
| | Belman Iron Works, Inc. | 40 | Gates & Crellin Co. | 109 | Kirkpatrick, E. | 14 | Stegic & Supply Co. | 98 | Stegic & Supply Co. | 98 | | |
| | Beltone Mills, The. | 97 | Gates & Crellin Co. | 109 | Kirkpatrick, E. | 14 | Steph. Shaper Co., The. | 131 | Steph. Shaper Co., The. | 131 | | |
| | Benjamin Electric Mfg. Co. | 1 | Gates & Crellin Co. | 109 | Kirkpatrick, E. | 14 | Stevens Arms & Tool Co., J. S. | 5 | Stevens Arms & Tool Co., J. S. | 5 | | |
| | Bennett Rub, Stamp & Seal Co. | 49 | Gates & Crellin Co. | 109 | | | | | | | | |

